

the treatment, prevention and diagnosis of medical conditions caused by P. acnes. The disorders include SAPHO syndrome (synovitis, acne, pustulosis, hyperostosis and osteomyelitis), uveitis and endophthalmitis. P. acnes is also involved in infections of bone, joints and the central nervous system, however it is particularly involved in the inflammatory lesions associated with acne vulgaris. A method for detecting the presence or absence of P. acnes in a patient comprises contacting a sample with a binding agent that binds to the proteins of the invention and determining the amount of bound protein in the sample. The polypeptides may be used as antigens in the production of antibodies specific for P. acnes proteins. These antibodies can be used to downregulate expression and activity of P. acnes polypeptides and therefore treat P. acnes infections. The antibodies may also be used as diagnostic agents for determining P. acnes presence, for example, by enzyme linked immunosorbent assay (ELISA). Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 436 AA;

Query Match 7.9%; Score 84.5; DB 4; Length 436;
Best Local Similarity 26.0%; Pred. No. 4.5;
Matches 45; Conservative 20; Mismatches 61; Indels 47; Gaps 9;

QY 23 DKITEINKAI---DDAIAIEQSETID---PMKVPDHADKFERHVGIVD-----F 67
DB 230 DATLVEVNPMTKTGDRILAIDGKMTVDNNASFRQPDHA-----GLVDRATTDPLELR 282
QY 68 KGELAMRNIEARGLKQMKRGDANVKGE-EGIVKAHLILIGVHDDIVSMYEDLAYKGLDLH 126
DB 283 AGEL-----GLNYYKLDGNGVIGNGAGLVNSTL-----DCVAYAGENF 321

QY 127 PTHVVISDIQDFVVALSLEISDEG-NITWTSFEVRQFANVNVNHHGLSILDPI 178
DB 322 FGSPAPANFLDIGGASAEIMANGLDIMSDEQVRSV--FVNVEGGITACDQV 372

RESULT 60
ABM54622

ID ABM54622 standard; protein; 436 AA.

XX AC ABM54622;

XX DT 20-OCT-2003 (first entry)

XX DE Propionibacterium acnes predicted ORF-encoded polypeptide #19298.

XX KW Acne vulgaris; antiseborrheic; dermatological; antibacterial;

XX KW immunostimulant; immune response; vaccine.

XX OS Propionibacterium acnes.

XX PN WO2003033515-A1.

XX PD 24-APR-2003.

XX PF 11-OCT-2002; 2002WO-US032727.

XX PR 15-OCT-2001; 2001US-00978825.

XX PA (CORI-) CORIXA CORP.

XX PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;
XX PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carter D;
XX PI Barth B, Vallieue-Douglas J;

XX DR WPI; 2003-381789/36.

XX DR N-PSDB; ACF64517.

XX PT New Propionibacterium acnes polypeptides and polynucleotides encoding the
XX PT polypeptide, useful for diagnosing, preventing or treating acne vulgaris,
XX PT or for stimulating an immune response specific for a P. acnes protein.

XX PS

XX Example 1; SEQ ID NO 19298; 1481bp; English.

CC The invention relates to an isolated polynucleotide (ACF64435-ACF64733)
CC encoding a Propionibacterium acnes protein. The invention also relates to
CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) and to
CC immunogenic fragments of P. acnes polypeptides. The invention
CC additionally encompasses expression vectors and host cells comprising a
CC polynucleotide of the invention; antibodies against polypeptides of the
CC invention; fusion proteins comprising a polypeptide of the invention; a
CC method for stimulating an immune response specific for a P. acnes
CC polypeptide and an isolated T cell population comprising T cells prepared
CC via this method; a vaccine composition (comprising P. acnes polypeptides,
CC polynucleotides, antibodies, fusion proteins, T cell populations, or
CC antigen-presenting cells that express the polypeptide); a method and kit
CC for detecting or determining the presence or absence of P. acnes in a
CC patient; and a method for inhibiting the development of P. acnes in a
CC patient. The P. acnes polypeptides, polynucleotides, antibodies, fusion
CC proteins, T cell populations or antigen-presenting cells that express the
CC polypeptides are useful for diagnosing, preventing or treating acne
CC vulgaris, or for stimulating an immune response specific for a P. acnes
CC protein. The polynucleotides can also be used as probes or primers for
CC nucleic acid hybridisation. The vaccine composition is useful for the
CC stimulation of an immune response against P. acnes, or for treating acne,
CC and the kit is useful for performing a diagnostic assay. The present
CC sequence represents a polypeptide predicted to be encoded by an ORF (open
CC reading frame) contained within the P. acnes polynucleotides of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 436 AA;

Query Match 7.9%; Score 84.5; DB 6; Length 436;
Best Local Similarity 26.0%; Pred. No. 4.5;
Matches 45; Conservative 20; Mismatches 61; Indels 47; Gaps 9;

QY 23 DKITEINKAI---DDAIAIEQSETID---PMKVPDHADKFERHVGIVD-----F 67
DB 230 DATLVEVNPMTKTGDRILAIDGKMTVDNNASFRQPDHA-----GLVDRATTDPLELR 282

QY 68 KGELAMRNIEARGLKQMKRGDANVKGE-EGIVKAHLILIGVHDDIVSMYEDLAYKGLDLH 126
DB 283 AGEL-----GLNYYKLDGNGVIGNGAGLVNSTL-----DCVAYAGENF 321

QY 127 PTHVVISDIQDFVVALSLEISDEG-NITWTSFEVRQFANVNVNHHGLSILDPI 178
DB 322 FGSPAPANFLDIGGASAEIMANGLDIMSDEQVRSV--FVNVEGGITACDQV 372

RESULT 61
AAG81478

ID AAG81478 standard; protein; 817 AA.

XX AC AAG81478;

XX DT 03-SEP-2001 (first entry)

XX DE S. epidermidis open reading frame protein sequence SEQ ID NO:50.

XX KW Staphylococcus epidermidis SRI strain; infection; diagnosis; vaccination;
XX KW endocarditis.

XX OS Staphylococcus epidermidis.

XX PN WO200134809-A2.

XX PD 17-MAY-2001.

XX PF 09-NOV-2000; 2000WO-US030782.

XX PR 09-NOV-1999; 99US-0164258P.

PA (GLAX) GLAXO GROUP LTD.
 XX Kimmerly WJ;
 PI
 XX
 DR WPI; 2001-316495/33.
 DR N-PSDB; AAH52328.
 XX
 XX Nucleic acids encoding polypeptides from Staphylococcus epidermidis,
 PT useful for vaccinating against infections, e.g. endocarditis.
 XX
 XX Claim 18; Page 59; 2188pp; English.
 XX
 XX AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
 CC (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
 CC and (II) can have antibacterial activity and therefore can be used in
 CC vaccination. The nucleic acids (I) may be used to produce the S.
 CC epidermidis polypeptides (II) via the production of vectors containing
 CC them which are used to produce hosts cells which express the
 CC polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
 CC used to vaccinate subjects and to raise antibodies against the bacteria.
 CC The polypeptides may also be used to assay for other inhibitors of their
 CC activity and therefore identify compounds that may be used for the
 CC treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
 CC AAH5090 represent specifically claimed S. epidermidis genomic DNA
 CC polynucleotide sequences from the present invention. AAH5091 to AAH5098
 CC represent oligonucleotide sequences and primers which are used in the
 CC exemplification of the present invention. N.B. The present invention
 CC specifically claims all the polynucleotide sequences given in the
 CC sequence listing of the present specification, however the sequence
 CC listing only goes up to SEQ ID NO:4454 so even though sequences are given
 CC in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
 CC for SEQ ID NO:4455 to 4464
 XX Sequence 817 AA;
 XX
 XX Query Match 7.9%; Score 84.5; DB 4; Length 817;
 XX Best Local Similarity 23.0%; Pred. No. 11;
 XX Matches 50; Conservative 35; Mismatches 87; Indels 45; Gaps 11;
 QY 18 DPH-----YDKITEINKAIDDAIAEQSETIDPMKVPDHPADKFERHVGIVDFKGEA 72
 Db 504 DTLHKRVIGQNDVANSISKAVRARAGLK-----DP-----KRPISFIFLPTG 548
 QY 73 MNIE-ARGL-KMKRQGDANVKG-EGIVKAHL---LIGV-----HDDIVSMEYDLAY 120
 Db 549 VGKTELARALAESMGEDDAMIRVDMSEFMKHAVSLVGGAPGVGHDGQJTEKVR 608
 QY 121 KLGDLPHTHTVSD----IQDFVVALSLEISDEGNITMTSFEVROFANV-----NHIGGL 172
 Db 609 K-----PYSVILFDEIEKAHPDVFNILLQVLDGHLTDTKGRTVDFNTVIIMTSNVGAQ 663
 QY 173 SILDPFVGLSDVLTAFQDTRKEMTKVLAPAFKRE 209
 Db 664 ELQDQRFAGFGGASGSDYETVRKTMKELKNSFRPE 700
 RESULT 62
 AA82217
 ID AAG82217 standard; protein; 817 AA.
 XX
 AC AAG82217;
 XX
 DT 03-SEP-2001. (first entry)
 DE S. epidermidis open reading frame protein sequence SEQ ID NO:1528.
 XX
 XX Staphylococcus epidermidis SR1 strain; infection; diagnosis; vaccination;
 KW endocarditis.
 XX
 OS Staphylococcus epidermidis.
 XX
 XX WO200134809-A2.
 XX
 XX

PD 17-MAY-2001.
 XX
 PF 09-NOV-2000; 2000WO-US030782.
 XX
 PR 09-NOV-1999; 99US-0164258P.
 XX
 PA (GLAX) GLAXO GROUP LTD.
 XX Kimmerly WJ;
 PI
 XX
 XX WPI; 2001-316495/33.
 DR N-PSDB; AAH53067.
 XX
 XX Nucleic acids encoding polypeptides from Staphylococcus epidermidis,
 PT useful for vaccinating against infections, e.g. endocarditis.
 XX
 XX Claim 18; Page 432; 2188pp; English.
 XX
 XX AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
 CC (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
 CC and (II) can have antibacterial activity and therefore can be used in
 CC vaccination. The nucleic acids (I) may be used to produce the S.
 CC epidermidis polypeptides (II) via the production of vectors containing
 CC them which are used to produce hosts cells which express the
 CC polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
 CC used to vaccinate subjects and to raise antibodies against the bacteria.
 CC The polypeptides may also be used to assay for other inhibitors of their
 CC activity and therefore identify compounds that may be used for the
 CC treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
 CC AAH5090 represent specifically claimed S. epidermidis genomic DNA
 CC polynucleotide sequences from the present invention. AAH5091 to AAH5098
 CC represent oligonucleotide sequences and primers which are used in the
 CC exemplification of the present invention. N.B. The present invention
 CC specifically claims all the polynucleotide sequences given in the
 CC sequence listing of the present specification, however the sequence
 CC listing only goes up to SEQ ID NO:4454 so even though sequences are given
 CC in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
 CC for SEQ ID NO:4455 to 4464
 XX Sequence 817 AA;
 XX
 XX Query Match 7.9%; Score 84.5; DB 4; Length 817;
 XX Best Local Similarity 23.0%; Pred. No. 11;
 XX Matches 50; Conservative 35; Mismatches 87; Indels 45; Gaps 11;
 QY 18 DPH-----YDKITEINKAIDDAIAEQSETIDPMKVPDHPADKFERHVGIVDFKGEA 72
 Db 504 DTLHKRVIGQNDVANSISKAVRARAGLK-----DP-----KRPISFIFLPTG 548
 QY 73 MNIE-ARGL-KMKRQGDANVKG-EGIVKAHL---LIGV-----HDDIVSMEYDLAY 120
 Db 549 VGKTELARALAESMGEDDAMIRVDMSEFMKHAVSLVGGAPGVGHDGQJTEKVR 608
 QY 121 KLGDLPHTHTVSD----IQDFVVALSLEISDEGNITMTSFEVROFANV-----NHIGGL 172
 Db 609 K-----PYSVILFDEIEKAHPDVFNILLQVLDGHLTDTKGRTVDFNTVIIMTSNVGAQ 663
 QY 173 SILDPFVGLSDVLTAFQDTRKEMTKVLAPAFKRE 209
 Db 664 ELQDQRFAGFGGASGSDYETVRKTMKELKNSFRPE 700
 RESULT 63
 ABU43148
 ID ABU43148 standard; protein; 817 AA.
 XX
 AC ABU43148;
 XX
 DT 19-JUN-2003 (first entry)
 DE Protein encoded by Prokaryotic essential gene #28675.
 XX Antisense; prokaryotic essential gene; cell proliferation; drug design.
 XX

OS Staphylococcus epidermidis.
 XX WO200277183-A2.
 XX 03-OCT-2002.
 XX 21-MAR-2002; 2002WO-US009107.
 XX 21-MAR-2001; 2001US-00815242.
 PR 06-SEP-2001; 2001US-00948993.
 PR 25-OCT-2001; 2001US-0342923P.
 PR 08-FEB-2002; 2002US-00072851.
 PR 06-MAR-2002; 2002US-0362699P.
 XX (ELIT-) ELITRA PHARM INC.
 XX Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW,
 PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
 XX WPI; 2003-029926/02.
 DR N-PSDB; ACA47018.
 XX New antisense nucleic acids, useful for identifying proteins or screening
 PT for homologous nucleic acids required for cellular proliferation to
 PT isolate candidate molecules for rational drug discovery programs.
 XX Claim 25; SEQ ID NO 71072; 1766pp; English.
 XX The invention relates to an isolated nucleic acid comprising any one of
 CC the 6213 antisense sequences given in the specification where expression
 CC of the nucleic acid inhibits proliferation of a cell. Also included are:
 CC (1) a vector comprising a promoter operably linked to the nucleic acid
 CC encoding a polypeptide whose expression is inhibited by the antisense
 CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
 CC polypeptide or its fragment whose expression is inhibited by the
 CC antisense nucleic acid; (4) an antibody capable of specifically binding
 CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
 CC proliferation or the activity of a gene in an operon required for
 CC proliferation; (7) identifying a compound that influences the activity of
 CC the gene product or that has an activity against a biological pathway
 CC required for proliferation, or that inhibits cellular proliferation; (8)
 CC identifying a gene required for cellular proliferation or the biological
 CC pathway in which a proliferation-required gene or its gene product lies
 CC or a gene on which the test compound that inhibits proliferation of an
 CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
 CC compound's activity; (11) a culture comprising strains in which the gene
 CC product is overexpressed or underexpressed; (12) determining the extent
 CC to which each of the strains is present in a culture or collection of
 CC strains; or (13) identifying the target of a compound that inhibits the
 CC proliferation of an organism. The antisense nucleic acids are useful for
 CC identifying proteins or screening for homologous nucleic acids required
 CC for cellular proliferation to isolate candidate molecules for rational
 CC drug discovery programs, or for screening homologous nucleic acids
 CC required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
 CC *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
 CC the target prokaryotic essential genes. Note: The sequence data for this
 CC patent did not form part of the printed specification, but was obtained
 CC in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 817 AA;

Query Match 7.9%; Score 84.5; DB 6; Length 817;
 Best Local Similarity 23.0%; Pred. No. 11;
 Matches 50; Conservative 35; Mismatches 87; Indels 45; Gaps 11;

QY 18 DPH-----YDKITEINKAIDDAIAEQSETIDPMKVPDHPKFERHVGIVDFKGEA 72

Db 504 DTLKRVIGQNDVANSISKAVRARAGLK-----DP-----KPIGFSFIFLPGTG 548

QY 73 MRNIE-ARGL-KOMKROGDANVKE-EGIVKAHL-----LIGV-----HDDIVSMEYDLAY 120

Db 549 VKTELARALAESMFGEDDAMIRVDMSEFMKHAHSRLVGAAPGVGHDDGQLTEKVR 608
 QY 121 KLGDLHPHTHVISD----IQDFVVALSLEISDEGNITMTSFEVRFQFANV-----NHIGGL 172
 Db 609 K-----PYSVILFDEIEKAHPDVENILLQLVDDGLHLDTKGRTVDFTNTVITMTSNVGAQ 663
 QY 173 SILDIFIGVLSVLTALFQDITVRKEMTKVLAFAFRE 209
 Db 664 ELQDQRFAGFGGASEGSDYETVRTKMTMKELKNSFRPE 700
 RESULT 64
 ABP39236
 ID ABP39236 standard; protein; 823 AA.
 XX AC ABP39236;
 XX 24-JUL-2002 (first entry)
 XX Staphylococcus epidermidis ORF amino acid sequence SEQ ID NO:4081.
 DE Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
 KW Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
 KW antibacterial; gene therapy.
 XX Staphylococcus epidermidis.
 OS Staphylococcus epidermidis.
 PN US6380370-B1.
 XX 30-APR-2002.
 XX 13-AUG-1998; 98US-00134001.
 XX 14-AUG-1997; 97US-0055779P.
 PR 08-NOV-1997; 97US-0064964P.
 XX (GENO-) GENOME THERAPEUTICS CORP.
 PA Doucette-Stamm LA, Bush D;
 PI WPI; 2002-381255/41.
 DR N-PSDB; ABN91781.
 XX Novel isolated nucleic acid encoding a Staphylococcus epidermis
 PT polypeptide, useful for diagnosing and treating bacterial infections.
 XX Disclosure; SEQ ID NO 4081; 267pp; English.
 XX ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading
 CC frame (ORF) nucleic acid sequences which encode the amino acid sequences
 CC given in ABP3124 to ABP37960. The *S. epidermidis* sequences have
 CC antibacterial activity and can be used in gene therapy. The sequences can
 CC also be used in the diagnosis and treatment of bacterial infections,
 CC particularly *S. epidermidis* infections. The sequences can be used to
 CC screen for compounds able to interfere with the *S. epidermidis* life cycle
 CC or inhibit *S. epidermidis* infection. N.B. The sequence data for this
 CC patent did not form part of the printed specification, but was obtained
 CC in electronic format directly from the USPTO web site
 XX Sequence 823 AA;

Query Match 7.9%; Score 84.5; DB 5; Length 823;
 Best Local Similarity 23.0%; Pred. No. 11;
 Matches 50; Conservative 35; Mismatches 87; Indels 45; Gaps 11;

QY 18 DPH-----YDKITEINKAIDDAIAEQSETIDPMKVPDHPKFERHVGIVDFKGEA 72

Db 510 DTLKRVIGQNDVANSISKAVRARAGLK-----DP-----KPIGFSFIFLPGTG 554

QY 73 MRNIE-ARGL-KOMKROGDANVKE-EGIVKAHL-----LIGV-----HDDIVSMEYDLAY 120

Db 555 VKTELARALAESMFGEDDAMIRVDMSEFMKHAHSRLVGAAPGVGHDDGQLTEKVR 614

QY 121 KLGDLHPHTHVISD----IQDFVVALSLEISDEGNITMTSFEVRFQFANV-----NHIGGL 172

QY 154 MTSEFVRFQFANVVNHGGLSIL-----DPIFGVLSD- 184

Db 860 MESVMVNYDTGRNSVGQLIQRYGEDGLCELVEFQNMPVTKLSNKSFKRPFQWSNE 919

QY 185 -VLTAIFQDITVRKEMT 199

Db 920 RLMKKVFTDDVIKEMT 935

RESULT 67
ABP27046
ID ABP27046 standard; protein; 306 AA.
AC ABP27046;
XX
XX
DT 02-JUL-2002 (first entry)
XX
DE Streptococcus polypeptide SEQ ID NO 3268.
XX
KW Streptococcus; GAS; GBS; Group B streptococcus; Streptococcus agalactiae;
KM Group A streptococcus; Streptococcus pyogenes; antibacterial;
KW antiinflammatory; infection; vaccine; meningitis; gene therapy.
XX
XX Streptococcus agalactiae.
OS
XX
XX W0200234771-A2.
PN
XX
PD 02-MAY-2002.
XX
XX 29-OCT-2001; 2001WO-GB004789.
PF
XX
XX 27-OCT-2000; 2000GB-00026337.
PR PR 24-NOV-2000; 2000GB-00028727.
PR PR 07-MAR-2001; 2001GB-00005640.
XX
XX (CHIR-) CHIRON SPA.
PA (GENO-) INST GENOMIC RES.
PA
PI Telford J, Masignani V, Margarit Y Rosl, Grandi G, Fraser C;
PI Tettelin H;
PI
WPI: 2002-352536/38.
DR N-PSDB; ABN67877.
XX
XX New Streptococcus protein for the treatment or prevention of infection or disease caused by Streptococcus bacteria, such as meningitis, and for detecting a compound that binds to the protein.
PT
PT
PS Claim 1; Page 3480-3481; 4525pp; English.
XX
XX The invention relates to a protein (ABP25413-ABP30895) from group B streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABNG6044-ABN71526 and antibodies that bind (I) are used in the manufacture of medicaments for the treatment or prevention of infection or disease caused by Streptococcus bacteria, particularly S. agalactiae and S. pyogenes.
CC Nucleic acids encoding (I) are used to detect Streptococcus in a biological sample. (I) is used to determine whether a compound binds to (I). A composition comprising (I) or a nucleic acid encoding (I), may be used as a vaccine or diagnostic composition. The disease caused by Streptococcus that is prevented or treated may be meningitis. Nucleic acid encoding (I) may be used to recombinantly produce (I) and may be used in gene therapy. Antibodies to (I) are used for affinity chromatography, immunoassays, and distinguishing/identifying Streptococcus proteins
CC
XX Sequence 306 AA;

Query Match 7.9%; Score 84; DB 5; Length 306;
Best Local Similarity 23.8%; Pred. No. 3.1;
Matches 34; Conservative 25; Mismatches 62; Indels 22; Gaps 6

Db 130 VANKPASQTQIIDWGEHOMKTGLIYVTSADPVLQIAAHEDIPLLELYDICEKVELT 189

Qy 126 HPTTHVSDIQDFVVALSLEISDEGNITMTS----FEVROFA-NVNHI--GGISILDPI 178

Db 190 KDPKYLIGRI-----IARPY-VGEPGNFTRTSNRHDYALKPFGTKVLDHLXGGYDVI--A 242

Qy 179 FGVLSDV 185

Db 243 IGLINDI 249

RESULT 69

AA59996

ID AA59996 standard; protein, 410 AA.

XX

AC AA59996;

DT 31-JAN-2000 (first entry)

DE Human endometrium tumour EST encoded protein 56.

DE Endometrium; human; tumour; cancer; anticancer; cytostatic;

KW EST: treatment; uterine; gene therapy; expressed sequence tag.

XX Homo sapiens.

OS DE19817948-A1.

PN 21-OCT-1999.

PD 17-APR-1998; 98DE-01017948.

PF 17-APR-1998; 98DE-01017948.

PR (META-) METAGEN GES GENOMFORSCHUNG MBH.

PA Rosenthal A, Specht T, Hinzmann B, Schmitt A, Pillarsky C, Dahl E,

XX WPI; 1999-591957/51.

DR N-PSDB; AA241999.

XX New nucleic acid sequences expressed in uterine cancer tissues, and

PT derived polypeptides, for treatment of uterine and endometrial cancer and

PT identification of therapeutic agents.

XX Claim 23; Page 237; 444pp; German.

XX This invention describes novel human nucleic acid (cDNA) sequences (A),

CC that are highly expressed in uterine tumour tissue and which have

CC anticancer and cytostatic activity. (A) are used (i) for recombinant

CC expression of polypeptides (B) and (ii) to isolate complete genes. (B)

CC are used (i) to identify agents suitable for treatment of uterine or

CC endometrial cancer; (ii) directly for treating these forms of cancer

CC (including expression from gene therapy vectors) and (iii) for generation

CC of specific antibodies. (A) are identified by assembling ESTs (expressed

CC sequence tags) from a particular tissue type before comparison of

CC expression patterns. This allows a significantly longer fragment of the

CC gene to be revealed, so should reduce the number of failures associated

CC with the fact that ESTs from different libraries may represent different

CC parts of the same unknown gene, distorting the estimated frequency of

CC occurrence in a particular tissue. AA59941-Y60328 represent protein

CC fragments encoded by the human endometrium tumour cDNA library derived

CC EST fragments represented in AA241981-Z42121

XX

SQ Sequence 410 AA;

Query Match 7.9%; Score 84; DB 2; Length 410;

Best Local Similarity 22.1%; Pred. No. 4.6;

Matches 40; Conservative 33; Mismatches 62; Indels 46; Gaps 9;

Qy 15 VSADPIHYDKITEINKAIDDAIAEQSETIDPMKVPDHDAD-KFERHVGIV---DFKGE 70

Db 246 VSAEKVNK---THSVNGITEADPTIYSGKVRPUSVDPQTQTEYQGMIEIVEBGDMKGE 302

Qy 71 LAMRNIEARGLQKMKROGDANVKGEIGVKAHLLIGHDDIVSMEYDLA----- 119

Db 303 -----VYFGIVGMANKDCICQGES--VKFQLCV-LQNAQTWAYNITPLRRATVECVK 354

Qy 120 -----YKLGDLHPTTHVSDIQDFVVALSLEISDEGNITMTSFEVROFANVNHIGGL 172

Db 355 DQFGFIVEGDSKLFPHVKEVD---GIELOAGDE-----VEFSVIPKSSGGL 401

Qy 173 S 173

Db 402 A 402

RESULT 70

ABB53885

ID ABB53885 standard; protein, 775 AA.

XX

AC ABB53885;

DT 29-AUG-2003 (revised)

DT 16-MAY-2002 (first entry)

DE Lactococcus lactis protein yf90.

XX

KW Biosynthesis; biodegradation; lactic bacterium; yogurt; cheese.

OS Lactococcus lactis; IL1403.

PN FR2807446-A1.

XX 12-OCT-2001.

PD 11-APR-2000; 2000FR-00004630.

PF 11-APR-2000; 2000FR-00004630.

PR (INRG) INRA INST NAT RECH AGRONOMIQUE.

PA Bolotine A, Sorokine A, Renault P, Ehrlich SD;

XX WPI; 2002-043418/06.

DR New nucleotide sequence useful in the identification of Lactococcus

PT lactis and related species.

XX Claim 6; SEQ ID NO 587; 2504pp; French.

XX The present invention is related to a Lactococcus lactis nucleotide

CC sequence (ABA90521) and related proteins (ABB53300-ABB55621). The nucleic

CC acid sequence is useful in the detection and/or amplification of nucleic

CC acid sequence, particularly to identify Lactococcus lactis or related

CC species. The proteins of the invention are useful for the biosynthesis or

CC biodegradation of a composition of interest. The invention helps research

CC in lactic bacteria, particularly useful in the production of yogurt and

CC cheese. Note: The sequence data for this patent is based on equivalent

CC patent WO200177334 (published 18-OCT-2001) which is available in

CC electronic format directly from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences. (Updated on 29-AUG-2003 to

CC standardise OS field)

XX

SQ Sequence 775 AA;

Query Match 7.9%; Score 84; DB 5; Length 775;

Best Local Similarity 19.8%; Pred. No. 11;

Matches 50; Conservative 37; Mismatches 103; Indels 62; Gaps 6;

Qy 22 YDKITEINKAIDDAIAEQSETIDPMKVPDHDAD-KFERHVGIVDFKGL-----AMEN 75

Db 397 YEKVSSEIHLLEEGFRVLVLATGKE--KIYDQLNGAYALGVVLNPIRENASTFNY 454

Qy 76 IEARGLQKMKROGD-----ANVKGEGIVKAHLL----- 104

Db 455 FAEQGVNIKVISGNDPOTVSAVAKRAGITGAERPIDANLLKTKEDLDQAVESVTVGRVT 514
 QY 105 -----IGVHDDIVSMEYD-----LAYKLGDLHPHTTHVISDQDFVALSLEISDE 149
 Db 515 PDQKRRLVQALKRKDHVTAMGTGVNDILAMKSADCSIAMASGSDAATQVAVVLLDSDF 574
 QY 150 GNLITMTSFEVRQFANVNHIGLSILDPIFGVLSVDLTAIFQDVTVERKWT-----V 201
 Db 575 GHTQVVTGRRVNVNQRSAIFLVKNLFSIILAIISAFVETPLQASQSLISLFTI 634
 QY 202 LAPAFKRELEKN 213
 Db 635 GIPGFLLSLEEN 646

RESULT 71
 AAE36119
 ID AAE36119 standard; protein; 9510 AA.
 XX
 AC AAE36119;
 DT 26-JUN-2003 (first entry)
 XX
 XX Streptomyces nodosus amphi gene encoded protein.
 DE Polyene; antibiotic; amphotericin; amph; polyketide synthase; enzyme.
 KW Streptomyces nodosus.
 OS Streptomyces nodosus.
 XX
 PN W0200297082-A2.
 XX
 PD 05-DEC-2002.
 XX
 XX 27-MAY-2002; 2002WO-IE000071.
 PR 31-MAY-2001; 2001IE-00000527.
 XX
 XX (UYDU-) UNIV COLLEGE DUBLIN.
 PA
 XX Caffrey JP;
 PI
 XX WPI; 2003-201271/19.
 DR
 DR N-PSDB; AADS4645.
 XX
 XX Novel cytochrome P450 enzyme and nucleotides encoding the enzyme, useful
 PT for preparing amphotericin derivative or analog antibiotic agent with
 PT altered properties, in biosynthesis of polyketide other than
 PT amphotericin.
 XX
 PS Claim 6; Page 120-162; 276pp; English.

CC The invention relates to the gene cluster encoding the polypeptides
 CC responsible for the biosynthesis of the polyene antibiotic amphotericin
 CC (amph) of Streptomyces nodosus. Polynucleotides of the invention are
 CC useful for preparing amphotericin derivatives or analogue antibiotic
 CC agents with altered properties and in the biosynthesis of polyketides
 CC other than amphotericin. amphDII, amphDII or amphDI mutants are useful
 CC for producing amphotericin derivatives glycosylated with alternative
 CC sugars; amphDII or amphDII gene sequences are useful in engineered
 CC biosynthesis of perosaminyl-amphoteronolide B; amphDIII or amphDII and
 CC amphN gene sequences are useful in the engineered biosynthesis of
 CC perosaminyl-16-desacetoxy-16-methyl amphoteronolide B; amphDIII, amphDII
 CC and amphI gene sequences are useful for preparing polypeptides capable
 CC of addition of mycosamine to a polyketide other than amphoteronolide A or
 CC B or for preparing polypeptides for in vitro synthesis of GDP-mycosamine.
 CC The present sequence is polyketide synthase multienzyme housing extension
 CC modules 9, 10, 11, 12, 13 and 14 encoded by S. nodosus amphi gene
 XX
 SQ Sequence 9510 AA;

Query Match 7.9%; Score 84; DB 6; Length 9510;
 Best Local Similarity 24.5%; Pred. No. 4e+02;
 Matches 53; Conservative 39; Mismatches 80; Indels 44; Gaps 10;

QY 3 KFLJIAAVFAVVASADPIHYD---KIT--BEINK-----AIDDAIAAEQSE 44
 Db 582 RFPFAAALDAALDAFTPHLDVPLRKVLWGEDADLDRTEYAQPALFAVEVALRLLESF 641
 QY 45 TIDMKVPDHA--DKFERHHVGVDPKGLAMRNTEARG-LKQMKRQGDANVKGEIGVKA 101
 Db 642 EVKPDHLAGSVGEIAAAHVAGV-FSLDDAATLVAARGRLMQALPEGGANVAVQASEDEV 700
 QY 102 HLLIGVHDHDIYSMEYDLYAYKLGDLHPHTTHVISDQDFVALSLEISDEGNIT----- 153
 Db 701 APFLAGHEDLVS-----LAAVNG--PSAVLSGDETTVTELAARLAADGRKTSRLRVSHA 753
 QY 154 ----MTSEVRQFANVNHIGLSILDPIFGVLSDV 185
 Db 754 FHSPLMAPMLDEFNRNVE---GLTLHSLPLPVSVDV 786

RESULT 72
 AAG89772
 ID AAG89772 standard; protein; 412 AA.
 XX
 AC AAG89772;
 DT 26-SEP-2001 (first entry)
 XX
 XX C glutamicum protein fragment SEQ ID NO: 3526.
 DE Coryneform bacterium; amino acid synthesis; vitamin; saccharide;
 KW organic acid synthesis.
 XX
 OS Corynebacterium glutamicum.
 XX
 PN EP1108790-A2.
 XX
 PD 20-JUN-2001.
 PF 18-DEC-2000; 2000EP-00127688.
 XX
 PR 16-DEC-1999; 99JP-00377484.
 PR 07-APR-2000; 2000JP-00159162.
 PR 03-AUG-2000; 2000JP-00280988.
 XX
 XX (KYOW) KYOWA HAKKO KOGYO KK.
 PA
 XX Nakagawa S, Mizoguchi H, Ando S, Hayashi M, Ochial K, Yokoi H;
 PI Tateishi N, Senoh A, Ikeda M, Ozaki A;
 XX
 DR WPI; 2001-376931/40.
 DR N-PSDB; AAH64991.

XX Novel polynucleotides derived from Coryneform bacteria, for identifying
 PT mutation point of a gene, measuring expression of a gene, analyzing
 PT expression profile or pattern of a gene and identifying homologous gene.
 PS
 PS Claim 17; SEQ ID NO 3526; 246pp + Sequence Listing; English.

CC The present invention provides a number of nucleotide and protein
 CC sequences from the Coryneform bacterium Corynebacterium glutamicum. These
 CC are useful for identifying the mutation point of a gene derived from a
 CC mutant of coryneform bacterium, measuring expression amount and analysing
 CC the expression profile or expression pattern of a gene derived from
 CC Coryneform bacterium, and identifying a homologue of a gene derived from
 CC Coryneform bacterium. Coryneform bacteria are useful for producing amino
 CC acids, nucleic acids, vitamins, saccharides and organic acids,
 CC particularly L-lysine. The present sequence is a protein described in the
 CC exemplification of the invention. Note: The sequence data for this patent
 CC did not form part of the printed specification, but was obtained in
 CC electronic format directly from the European Patent Office

SQ Sequence 412 AA;

Query Match 7.8%; Score 83.5; DB 4; Length 412;

Best Local Similarity 31.5%; Pred. No. 5.3; Matches 34; Conservative 16; Mismatches 41; Indels 17; Gaps 6;

QY 54 HADKFERHVGTVDFKGLAMENIARGLKQMKRGDANVKGEGIVKHAHLIGVHDDIVS 113
Db 134 YAEAFB-----IQPSGSDSFVTLKSGDFKDALEQ-----QWEGSARPVAAUGVSDN-VS 183

QY 114 MEYDLAYKGLDHPHTTHVISDI-----QDFVALSLBISDEGNITMTS 156
Db 184 YTYDINRPIGD-RVTSVTIDTDLDPDRDYVVAASLYL-QSGNEGMTA 229

RESULT 73
ADC30987
ID ADC30987 standard; protein; 517 AA.
XX
AC ADC30987;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human novel polypeptide sequence, SEQ ID NO:1069.
XX
KW Human; diagnostic; drug screening; forensics; gene mapping;
KW biodiversity assessment; Parkinson's disease; Alzheimer's disease;
KW neurodegenerative diseases; anaemia; platelet disorder; wound; burns;
KW ulcers; osteoporosis; autoimmune disease; cancer;
KW molecular weight marker; food supplement; antiparkinsonian; nootropic;
KW neuroprotective; antiandemic; anticoagulant; thrombolytic; vulnerary;
KW antitumor; osteopathic; immunosuppressive; antiinflammatory; cytostatic;
KW gene therapy; chromosome 15q21.3.
XX
OS Homo sapiens.
XX
PN WO2003029271-A2.
XX
PD 10-APR-2003.
XX
PF 24-SEP-2002; 2002WO-US030474.
XX
PR 24-SEP-2001; 2001US-0324631P.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang TY, Zhang J, Ren F, Xue AJ, Zhao QA, Wang J, Wehrman T;
PI Zhou P, Ghosh M, Wang D, Ma Y, Asundi V, Wang Z, Weng G;
PI Haley-Vicente D, Dermanac RT;
XX
XX WPI; 2003-371981/35.
DR N-PSDB; ADC30016.
XX
XX New polynucleotide and polypeptide useful for diagnosing, preventing or
PT treating conditions such as neurodegenerative diseases, anemias, platelet
PT disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or
PT cancer.
XX
PS Claim 20; SEQ ID NO 1069; 1185pp; English.
XX
XX The invention relates to 971 novel human cDNA sequences (ADC29919-
CC ADC30889) and the polypeptides they encode (ADC30890-ADC31860). The
CC invention also relates to nucleic acid sequences over 99% identical with
CC the novel human cDNAs. The invention additionally encompasses expression
CC vectors and host cells comprising a nucleic acid of the invention; the
CC recombinant production of a polypeptide of the invention; an antibody
CC against a polypeptide of the invention; a method of detecting
CC polynucleotides or polypeptides of the invention; and methods of
CC identifying a compound which binds to a polypeptide of the invention. The
CC invention further discloses methods of preventing, treating or
CC ameliorating a medical condition; kits comprising polynucleotide probes
CC and/or monoclonal antibodies for carrying out the methods of the
CC invention; methods for the identification of compounds that modulate the
CC expression or activity of the polynucleotide and/or polypeptide; and 767
CC contig sequences corresponding to the cDNA sequences of the invention
CC (ADC31861-ADC32627) and the polypeptides encoded by the contigs (ADC32628

CC -ADC33394). The nucleic acids and polypeptides of the invention are
CC useful in diagnostics, drug screening, forensics, gene mapping, in the
CC identification of mutations responsible for genetic disorders or other
CC traits, for assessing biodiversity, and in producing many other types of
CC data and products dependent on DNA and amino acid sequences. They are
CC also used for treating diseases such as Parkinson's disease, Alzheimer's
CC disease and other neurodegenerative diseases, anaemia, platelet
CC disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or
CC cancer. The nucleic acids may also be used as hybridisation probes or
CC primers, and in the recombinant production of a protein. The polypeptides
CC are also useful in generating antibodies, as molecular weight markers,
CC and as food supplements. The present sequence represents a specifically
CC claimed human polypeptide sequence of the invention. Note: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 517 AA;

Query Match 7.8%; Score 83.5; DB 7; Length 517;
Best Local Similarity 21.7%; Pred. No. 7.3;
Matches 31; Conservative 29; Mismatches 66; Indels 17; Gaps 4;

QY 21 HYDKITEINKAIDDAIAIFQSETIDPMKVPDHDKFERHVGIVDFKGLAMENIAR- 79
Db 160 HLGKTIKQLKEMADIVEASRTSTLELQNLDEYKURRE--LAEMQQLKENTLEAK 217

QY 80 -GLKQMKQGDNAVGE-----EGIVKHAHLIGVHDDIVSMEYDLAYKGLDHP 128
Db 218 SRLTAMKQDEMRLEMEELRDYQRAQDEALTQRQLL---EQLKDLLEYEAKSHLKD 274

QY 129 THVISDIDQFVVALSLBISDEGN 151
Db 275 SRLVKQMEDKVSQLEMELEERN 297

RESULT 74
ABU50581
ID ABU50581 standard; protein; 548 AA.
XX
AC ABU50581;
XX
DT 19-JUN-2003 (first entry)
XX
DE Protein encoded by Prokaryotic essential gene #36108.
XX
KW Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS Yersinia pestis.
XX
PN WO200277183-A2.
XX
PD 03-OCT-2002.
XX
PF 21-MAR-2002; 2002WO-US009107.
XX
PR 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948993.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX
XX WPI; 2003-029926/02.
DR N-PSDB; ACA54451.
XX
XX New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.

XX PS Claim 25; SEQ ID NO 78505; 1766pp; English.

XX CC The invention relates to an isolated nucleic acid comprising any one of

XX CC the 6213 antisense sequences given in the specification where expression

XX CC of the nucleic acid inhibits proliferation of a cell. Also included are:

XX CC (1) a vector comprising a promoter operably linked to the nucleic acid

XX CC encoding a polypeptide whose expression is inhibited by the antisense

XX CC nucleic acid; (2) a host cell containing the vector; (3) an isolated

XX CC polypeptide or its fragment whose expression is inhibited by the

XX CC antisense nucleic acid; (4) an antibody capable of specifically binding

XX CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular

XX CC proliferation or the activity of a gene in an operon required for

XX CC proliferation; (7) identifying a compound that influences the activity of

XX CC the gene product or that has an activity against a biological pathway

XX CC required for proliferation, or that inhibits cellular proliferation; (8)

XX CC identifying a gene required for cellular proliferation or the biological

XX CC pathway in which a proliferation-required gene or its gene product lies

XX CC or a gene on which the test compound that inhibits proliferation of an

XX CC organism acts; (9) manufacturing an antibiotic; (10) profiling a

XX CC compound's activity; (11) a culture comprising strains in which the gene

XX CC product is overexpressed or underexpressed; (12) determining the extent

XX CC to which each of the strains is present in a culture or collection of

XX CC strains; or (13) identifying the target of a compound that inhibits the

XX CC proliferation of an organism. The antisense nucleic acids are useful for

XX CC identifying proteins or screening for homologous nucleic acids required

XX CC for cellular proliferation to isolate candidate molecules for rational

XX CC drug discovery programs, or for screening homologous nucleic acids

XX CC required for proliferation in cells other than *S. aureus*, *S. typhimurium*,

XX CC *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of

XX CC the target prokaryotic essential genes. Note: The sequence data for this

XX CC patent did not form part of the printed specification, but was obtained

XX CC in electronic format directly from WIPO at

XX CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 548 AA;

Query Match 7.8%; Score 83.5; DB 6; Length 548;

Best Local Similarity 18.1%; Pred. No. 7.9;

Matches 43; Conservative 45; Mismatches 80; Indels 69; Gaps 9;

QY 13 VAYSADPHYDKITTEINKAIDDA-TAAIQSQSETIDPMKVPDHPADKFERHVGIVDFPKGEL 71

DB 107 VAAGNPM-----DLKRGIDKRAVAAVEE---LKKLSVPCSDSKAIAQVGTISANSDS 156

QY 72 AMENIARGLKQKQKQDANVKEEGIVKHAHLIGVHDD---IVSMEYDLAY----- 120

DB 157 TVGELIAQAMEKV-----GKEGVITVEEGSLQDELVDVVEGQFDRGYLSPIYFINK 207

QY 121 -----KLGDLHPHTHTVISDIDQDFVALSLSISDEGNTMTSFEV 159

DB 208 PETGSIELESPFILLADKKTSINREMLPVLEAVAKAGKPLIIAEDVEGALATL----- 262

QY 160 RQFANVNHIGGL-----SILDPFEGVLSDVLTAFQTVRKENTKVLAPAKRELEK 212

DB 263 -----VNTVRGIVKVAAPKPGFG---DRRKALQDIAFLTAGTVISEIGLELEK 311

RESULT 75

ADL515622

ID ADE15622 standard; protein; 798 AA.

XX AC ADE15622;

XX DT 29-JAN-2004 (first entry)

XX DE Human structural and cytoskeleton-associated protein (SCAP) #1.

XX KW human; structural and cytoskeleton-associated protein; SCAP;

XX KW arteriosclerosis; atherosclerosis; cirrhosis; hepatitis; myelofibrosis;

XX KW psoriasis; cancer; pneumonia; chronic bronchitis; yellow fever;

XX KW influenza; measles; mumps; HIV; human T lymphotropic virus; rabies;

XX KW gastroenteritis; encephalitis; rubella; epilepsy;

KW ischaemic cerebrovascular disease; stroke; cerebral neoplasm;

KW Alzheimer's disease; Pick's disease; Huntington's disease; dementia;

KW Parkinson's disease; amyotrophic lateral sclerosis; atrophy;

KW hereditary ataxia; multiple sclerosis; meningitis; brain abscess;

KW prion disease; Creutzfeldt-Jakob disease; insomnia; neurofibromatosis;

KW cerebral palsy; myasthenia gravis; anxiety.

OS Homo sapiens.

PN WO2003062391-A2.

XX 31-JUL-2003.

PD 16-JAN-2003; 2003WO-US001772.

XX 18-JAN-2002; 2002US-0350702P.

XX 25-JAN-2002; 2002US-0351715P.

PR 15-FEB-2002; 2002US-0357402P.

PR 10-MAY-2002; 2002US-0379880P.

PR 17-MAY-2002; 2002US-0381599P.

PR 07-JUN-2002; 2002US-0387270P.

PR 19-JUL-2002; 2002US-0397125P.

XX (INCY-) INCYTE GENOMICS INC.

XX Yue H, Griffin JA, Richardson TW, Tang YT, Thangavelu K;

PI Forsythe JD, Becha SD, Chawla NK, Hatalla AJA, Swarnakar A;

PI Marquiz JP, Gorvad AE, Bhagun MK, Lu DAW, Arvizu CS, Kable AE;

PI Lee SY, Ramkumar J, Jiang X, Jackson AA, Khare R, Elliott VS;

PI Bulloch SA, Xu Y, Lee S, Lehr-Mason PM;

XX WPI: 2003-671468/63.

DR N-F5DB; ADE15653.

XX New isolated polypeptides useful for treating e.g. cell proliferative

PT disorders, viral infections and neurological disorders.

XX Claim 1; SEQ ID NO 1; 357pp; English.

XX The invention comprises the amino acid and coding sequences of human

CC structural and cytoskeleton-associated proteins (SCAP). The SCAP DNA and

CC protein sequences of the invention are useful for the diagnosis and

CC treatment of: arteriosclerosis, atherosclerosis, cirrhosis, hepatitis,

CC myelofibrosis, psoriasis, primary cancer, pneumonia, chronic bronchitis,

CC yellow fever, influenza, measles, mumps, HIV, human T lymphotropic virus,

CC rabies, gastroenteritis, encephalitis, rubella, epilepsy, ischaemic

CC cerebrovascular disease, stroke, cerebral neoplasm, Alzheimer's disease,

CC Pick's disease, Huntington's disease, dementia, hereditary ataxias, multiple

CC amyotrophic lateral sclerosis, atrophy, hereditary ataxias, multiple

CC sclerosis, meningitis, brain abscess, prion disease, Creutzfeldt-Jakob

CC disease, insomnia, neurofibromatosis, cerebral palsy, myasthenia gravis,

CC anxiety. The present amino acid sequence represents a human SCAP of the

CC invention.

XX SQ Sequence 798 AA;

Query Match 7.8%; Score 83.5; DB 7; Length 798;

Best Local Similarity 21.7%; Pred. No. 13;

Matches 31; Conservative 29; Mismatches 66; Indels 17; Gaps 4;

QY 21 HYDKITEINKAIDDAIAIQSQSETIDPMKVPDHPADKFERHVGIVDFPKGELAMENIAR- 79

DB 441 HLGKTIKLEKEMADIVEASTSTLELQNLQDEYKKNRRE--LAEMQRLKEKTELEAK 498

QY 80 -GLKQKTRQGDANVKGE-----EGIVKHAHLIGVHDDIVSMEDYLAAYKLGDLHPT 128

DB 499 SFLTAKMKQDEMRLEWEEELRDYQRAQDEALTKRQL---EQLKDLLEYLEAKSHLKDDR 555

QY 129 THVISDIDQDFVALSLSISDEGN 151

DB 556 SRLVKQMEDKVSQLEMELEERN 578

QY 145 EISDEGNITMTSFVRQFANVNHIGLSILDPIFGVLSDLVLTAFQDVTVRKEMTKVLAP 204
 DB 101 -IDSPGHVDFSS-EVTAALRVTD--GALVVDCVGVGVQVETVL-----RQALTERIRP 151

RESULT 78
 AAB71315
 ID AAB71315 standard; protein; 845 AA.
 XX
 AC AAB71315;
 XX
 DT 18-NOV-2002 (first entry)
 XX
 DE L. major 4G2-83 extended antigen SEQ ID 110.
 XX
 KW Antigen; immunogenic; antiparasitic; immunostimulant; leishmaniasis;
 KW gene therapy; vaccine; interleukin-12 agonist.
 XX
 OS Leishmania major.
 XX
 FN US2002081320-A1.
 XX
 PD 27-JUN-2002.
 XX
 EF 04-JUN-2001; 2001US-00874923.
 XX
 PR 22-SEP-1995; 95US-00533669.
 PR 12-FEB-1997; 97US-00798841.
 PR 27-AUG-1997; 97US-00920609.
 PR 12-FEB-1998; 98US-00022765.
 PR 30-OCT-1998; 98US-00183861.
 PR 14-APR-2000; 2000US-00551974.
 PR 05-MAY-2000; 2000US-00565501.
 PR 14-AUG-2000; 2000US-00639206.
 XX
 PA (REED/) REED S G.
 PA (CAMP/) CAMPOS-NETO A.
 PA (WEBB/) WEBB J R.
 PA (DILL/) DILLON D C.
 PA (SKEI/) SKEIKY Y A W.
 PA (BHAT/) BHATIA A.
 PA (COLE/) COLER R N.
 PA (PROB/) PROBST P.
 PA (BRAN/) BRANNON M.
 XX
 FI Reed SG, Campos-Neto A, Webb JR, Dillon DC, Skeiky YAW, Bhatia A;
 PI Coler RN, Probst P, Brannon M;
 XX
 DR WPI; 2002-635457/68.
 DR N-PSDB; AAF88573.
 XX
 PT New polypeptide containing at least an immunogenic portion of one or more
 PT Leishmania antigens or their variants, useful for preventing, treating
 PT and detecting leishmaniasis, and stimulating immune responses in
 PT patients.
 XX
 PS Claim 1; Page 108-110; 163pp; English.
 XX
 CC This invention describes a novel polypeptide containing an immunogenic
 CC portion of a Leishmania antigen or its variant which has antiparasitic
 CC and immunostimulant activity. The compositions and methods of the present
 CC invention are useful for preventing, treating and detecting
 CC leishmaniasis, and stimulating immune responses in patients against
 CC leishmaniasis. The polypeptides and the polynucleotides encoding them can
 CC be used for gene therapy, in vaccines or as interleukin-12 agonists. The
 CC compositions and methods of the present invention, as compared to prior
 CC art, are more improved therapeutic modalities in the diagnosis,
 CC prevention and treatment of leishmaniasis
 XX
 SQ Sequence 845 AA;

Query Match 7.8%; Score 83; DB 5; Length 845;
 Best Local Similarity 23.3%; Pred. No. 17;

Matches 42; Conservative 34; Mismatches 70; Indels 34; Gaps 10;
 QY 29 INKAIDDAIAIEQSETIDPMKVPDPHADKFERHVGIVDFKGLAMRNTEARGLKQMKRQ 88
 DB 2 VNFTVDQVRELMDYDPQIRNMSVIAHVD-----HGKSTLSDSLVAAGAIIXMEERAG 52
 QY 89 DANV--KGEEGIVKAHLLIGVHDDIVSMEDLAYK-LGDLHPHTTHVISDIQDFVVALSL 144
 DB 53 DKRINDTRADE-IARG---ITIKSTAIASHVHPKEMIGDLD-----DDKRDFFLINL-- 100
 QY 145 EISDEGNITMTSFVRQFANVNHIGLSILDPIFGVLSDLVLTAFQDVTVRKEMTKVLAP 204
 DB 101 -IDSPGHVDFSS-EVTAALRVTD--GALVVDCVGVGVQVETVL-----RQALTERIRP 151

RESULT 79
 ADB78873
 ID ADB78873 standard; protein; 845 AA.
 XX
 AC ADB78873;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Leishmania T cell antigen 4G2-83 extended protein.
 XX
 KW Antigen; protozoas; antibacterial; virucide; cytostatic;
 KW immunostimulant; leishmaniasis; Leishmania infection; immune response;
 KW interleukin-2 stimulation; cancer; bacterial infection; viral infection;
 XX protozoan infection.
 OS Leishmania major.
 XX
 PN US2002169285-A1.
 XX
 PD 14-NOV-2002.
 XX
 PF 20-NOV-2001; 2001US-00991496.
 XX
 PR 22-SEP-1995; 95US-00533669.
 PR 12-FEB-1997; 97US-00798841.
 PR 27-AUG-1997; 97US-00920609.
 PR 12-FEB-1998; 98US-00022765.
 PR 30-OCT-1998; 98US-00183861.
 PR 14-APR-2000; 2000US-00551974.
 PR 05-MAY-2000; 2000US-00565501.
 PR 14-AUG-2000; 2000US-00639206.
 PR 04-JUN-2001; 2001US-00874923.
 XX
 PA (REED/) REED S G.
 PA (CAMP/) CAMPOS-NETO A.
 PA (WEBB/) WEBB J R.
 PA (DILL/) DILLON D C.
 XX
 PI Reed SG, Campos-Neto A, Webb JR, Dillon DC;
 XX
 DR WPI; 2003-605673/57.
 DR N-PSDB; ADB78872.
 XX
 PT Novel isolated polypeptide useful for preventing or treating
 PT leishmaniasis, comprises an immunogenic portion of a Leishmania antigen
 PT or its variant.
 XX
 PS Claim 1; Page 110-112; 183pp; English.
 XX
 CC The invention relates to an isolated polypeptide comprising an
 CC immunogenic portion of a Leishmania antigen or its. Also included are
 CC antigenic epitopes, fusion proteins comprising an isolated polypeptide
 CC fusion protein comprising at least two contiguous antigenic epitopes,
 CC polynucleotides encoding the antigens or fusion proteins, a recombinant
 CC expression vector comprising the polynucleotide, a host cell transformed
 CC with the vector and a composition (pharmaceutical or immunogenic)
 CC comprising the antigen or fusion protein and a physiologically acceptable
 CC carrier. The compositions are useful for inducing protective immunity


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SQ Sequence 548 AA;
Query Match 7.7%; Score 82.5; DB 2; Length 548;
Best Local Similarity 18.7%; Pred. No. 10;
Matches 49; Conservative 43; Mismatches 83; Indels 87; Gaps 10;
QY 10 VAFVAVSADPHYDKITEINKAIDDAIAEQSETIDPMKDPHADKFERHVGIVDFKG 69
DB 104 VLVAAAGNPM-----AIKRGIDKAVAV--TKELSDITKPTRQKEIAQVGTISANS 154
QY 70 ELARNIEARGLKQMKRQGDANVKGEGIVKAHLIGVHDDIVSMYDAY-----120
DB 155 DTIGNIIAEMAKVKGKGGVITVEERAG-----LETTLDVWEGMKFDGGLSPYFVTNP 208
QY 121 -----KLGDLPTTHVISDIQDFVVALSLETSDEGNITMTSFEVR 160
DB 209 EKWCCELDNPIYLCNEKITSKMDMPLLEQVAKVRPLIIAEDVEGEALATL-----262
QY 161 QFANVNVHIGG---LSILDPIFG-----VLSD--VLT---AIFQD-----192
DB 263 ---VVKLRGALQVAVKAPGFGERRKAMLEDIAITGGEAIFEDRGIKLENNVSLSLG 318
QY 193 -----TVRKEMTKVLAPAKRE 209
DB 319 TAKRVVIDKENTIVDGAQKSE 340

RESULT 82
ABU11518
ID ABU11518 standard; protein; 953 AA.
XX AC ABU11518;
XX DT 12-FEB-2003 (first entry)
XX DE Human MDDT polypeptide SEQ ID 465.
XX KW MDDT; human; disease detection and treatment molecule polypeptide;
XX KW anti-inflammatory; immunosuppressive; osteopathic; anti-HIV;
XX KW haemostatic; nephrotropic; antianemic; antipsoriatic; hepatotropic;
XX KW gene therapy; protein replacement therapy; cell proliferative disorder;
XX KW cancer; adenocarcinoma; leukemia; lymphoma; melanoma; sarcoma;
XX KW anaemia; Crohn's disease; acquired immunodeficiency syndrome; AIDS;
XX KW Goodpasture's syndrome; inflammation; osteoporosis; thrombocytopaenia;
XX KW psoriasis; hepatitis.
XX OS Homo sapiens.
XX PN WO200279449-A2.
XX PD 10-OCT-2002.
XX PF 27-MAR-2002; 2002WO-US0009944.
XX PR 28-MAR-2001; 2001US-0279619P.
XX PR 29-MAR-2001; 2001US-0280067P.
XX PR 29-MAR-2001; 2001US-0280068P.
XX PR 16-MAY-2001; 2001US-0291280P.
XX PR 17-MAY-2001; 2001US-0291829P.
XX PR 17-MAY-2001; 2001US-0291849P.
XX PR 19-JUN-2001; 2001US-0299428P.
XX PR 20-JUN-2001; 2001US-0299776P.
XX PR 20-JUN-2001; 2001US-0300001P.
XX PA (INCYTE) INCYTE GENOMICS INC.
XX PI Daffo A, Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J;
XX PI Dufour GE, Hillman JL, Yu JY, Tuason O, Yap PE, Amshay SR;
XX PI DeGherthy SC, Dam TC, Liu TF, Nguyen DA, Kleefeld Y, Gerstin EH;
XX PI Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B;
XX PI Flores V, Marwaha R, Lo A, Lan RV, Urashka ME;
XX PI WPI; 2003-058431/05.

DR N-PSDB; ABX34508.
XX PT New purified disease detection and treatment molecule proteins and
XX PT polynucleotides, useful for diagnosing, treating or preventing cancers
XX PT (e.g. leukemia or sarcoma), anemia, Crohn's disease, AIDS, osteoporosis
XX PT or hepatitis.
XX PS Claim 27; SEQ ID NO 465; 339pp + Sequence Listing; English.
XX CC This invention describes a novel disease detection and treatment molecule
XX CC polypeptide (MDDT) which has anti-inflammatory, immunosuppressive,
XX CC osteopathic, cytostatic, anti-HIV, haemostatic, nephrotropic,
XX CC antianemic, antipsoriatic and hepatotropic activity. The polynucleotides
XX CC and the polypeptides of the invention can be used for gene therapy,
XX CC protein replacement therapy and are useful for treating a variety of
XX CC diseases or conditions. These polypeptides or polynucleotides are
XX CC particularly useful for diagnosing, treating or preventing cell
XX CC proliferative disorders (e.g. cancers including adenocarcinoma,
XX CC leukaemia, lymphoma, melanoma, myeloma or sarcoma), anaemia, Crohn's
XX CC disease, acquired immunodeficiency syndrome (AIDS), Goodpasture's
XX CC syndromes, inflammation, osteoporosis, thrombocytopaenia, psoriasis or
XX CC hepatitis. ABU11450-ABU11845 represent the MDDT polynucleotides encoded
XX CC by ABU11450-ABU11845, described in the disclosure of the invention. NOTE:
XX CC The sequence data for this patent did not form part of the printed
XX CC specification, but was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 953 AA;
Query Match 7.7%; Score 82.5; DB 6; Length 953;
Best Local Similarity 24.2%; Pred. No. 22;
Matches 39; Conservative 32; Mismatches 49; Indels 41; Gaps 7;
QY 45 TIDPMKVPDHADKFERHVGIVDFKGEL-----AMENIEFARGLKQMKRQG-----88
DB 705 TINPLCIEMYADK-ESRGGVLEPGEVTEIKERKDKLIKSMERIDPAYKKLEQLGEPDLS 763
QY 89 DANVKGEGIVKAHLIGVHDDIVSMYDAYVGLDHLPT-----THVISDIQDFVVAL 142
DB 764 DKRDKLEGRUKAR-----EDLLPIYHQVAVQAFADHDTGRLMEKGVISDILEWKTAR 818
QY 143 S-----LTSIDSGNITMTSFEVRQFANVNVHIGGLSIL 175
DB 819 TFLYWRLLRLLEDQ-----VKQELQASGELSHVHIQSM 854

RESULT 83
ABP59211
ID ABP59211 standard; protein; 2458 AA.
XX AC ABP59211;
XX DT 10-MAY-2003 (first entry)
XX DE Human drug metabolising enzyme, DME-2, SEQ ID 2.
XX KW Human; drug metabolising enzyme; anti-HIV; antiallergic;
XX KW antiinflammatory; antianemic; thrombolytic; antilipemic; antidiarrheic;
XX KW antiarteriosclerotic; antiasthmatic; immunosuppressive; antithyroid;
XX KW cytostatic; hepatotropic; virucide; dermatological; antidiabetic;
XX KW nephrotropic; antigout; neuroprotective; thyromimetic; osteopathic;
XX KW antiarthritic; antipsoriatic; uropathic; ophthalmological; antirheumatic;
XX KW haemostatic; gene therapy; cell proliferative disorder; cancer;
XX KW developmental disorder; endocrine disorder; eye disorder;
XX KW metabolic disorder; gastrointestinal disorder; liver disorder;
XX KW autoimmune disorder; inflammatory disorder; DME-2.
XX OS Homo sapiens.
XX PN WO2003004608-A2.
XX PD 16-JAN-2003.
```

PF 05-JUL-2002; 2002WO-US021105.
XX
XX
XX 06-JUL-2001; 2001US-0303745P.
PR 13-JUL-2001; 2001US-0305402P.
PR 17-JUL-2001; 2001US-0308158P.
PR 14-SEP-2001; 2001US-0322127P.
XX
XX (INCY-) INCYTE GENOMICS INC.
XX
XX Griffin JA, Ramkumar J, Emerling BM, Richardson TW, Li JX;
PI Warren BA, Honchell CD, Baughn MR, Tang YT, Lee EA, Elliott VS;
PI Yue H, Lee S, Swarnakar A, Forsythe IJ, Sanjanwala MM, Yao WG;
PI Zebajarian Y, Gorvad AE, Becha SD, Burford N;
XX
XX WPI; 2003-221588/21.
DR N-PSDB; ABZ81302.
XX
XX New drug metabolizing enzymes (DME) useful for diagnosing, treating or
PT preventing diseases or conditions associated with aberrant DME
PT expression, e.g. cancer, AIDS, atherosclerosis, diabetes, glaucoma,
PT hepatitis or osteoporosis.
XX
XX Claim 1; Page 149-155; 181pp; English.
XX
XX The present invention relates to novel human drug metabolising enzymes,
CC DME-1 to DME-13 (ABP59210-ABP59222) and their coding sequences (ABZ81301-
CC ABZ81313). The sequences are useful for diagnosing, treating or
CC preventing disorders associated with aberrant expression of DME,
CC particularly cell proliferative disorders (e.g. arteriosclerosis,
CC atherosclerosis, cirrhosis, paroxysmal nocturnal haemoglobinuria,
CC polycythaemia vera, psoriasis, primary thrombocytopenia or cancer),
CC developmental disorders (e.g. renal tubular acidosis, anaemia or mental
CC retardation), endocrine (e.g. osteoporosis, thrombosis, diabetes), eye
CC disorders (e.g. glaucoma, keratitis), metabolic (e.g. hyperlipidaemia,
CC cystic fibrosis), gastrointestinal disorders (e.g. gastroenteritis,
CC diarrhoea), liver disorders (e.g. hepatitis, Reye's syndrome), or
CC autoimmune/inflammatory disorders (e.g. AIDS, allergies, asthma,
CC autoimmune thyroiditis, contact dermatitis, Crohn's disease,
CC glomerulonephritis, Goodpasture's syndrome, gout, Graves' disease,
CC Hashimoto's thyroiditis, irritable bowel syndrome, multiple sclerosis,
CC osteoarthritis, pancreatitis, Reiter's syndrome, rheumatoid arthritis,
CC Sjogren's syndrome, uveitis). They are also useful in the assessing the
CC effects of exogenous compounds on the expression of nucleic acid and
CC amino acid sequences of DME. The polynucleotides encoding DME are useful
CC for creating transgenic animals to model human disease
XX
XX Sequence 2458 AA;
Query Match 7.7%; Score 82.5; DB 6; Length 2458;
Best Local Similarity 24.2%; Pred. No. 85;
Matches 39; Conservative 32; Mismatches 49; Indels 41; Gaps 7;
QY 45 TIDPMKVPDHADKFRHVGIVDFKGL-----AMNIEARGLKQKQKQ----- 88
DB 2210 TINPLCIEMYADK-ESRGVLEPGTVEIKFRKDLIKSMRIPAYKLMQEGPDLS 2268
QY 89 DANVKGEGIVKAHLIGVHDDIVSMEDYALYKGLDLHPT-----THVISDIQDFVVAL 142
DB 2269 DKDRKDLGRKAR-----EDLLLPYHQVAVQFADFDTPGRMLEKGVISDILEWKTAR 2323
QY 143 S-----LISDEGNTMTSFEVRQFANVNVHIGLSIL 175
DB 2324 TFLYWRRLRLLEDQ-----VKQEILOASGELSHVHIQSM 2359
RESULT 84
AAU32848
ID AAU32848 standard; protein; 2486 AA.
XX
XX AAU32848;
XX
XX 18-DEC-2001 (first entry)
XX

DE Novel human secreted protein #3339.
XX
XX Human; vaccination; gene therapy; nutritional supplement;
KW stem cell proliferation; haematopoiesis; nerve tissue regeneration;
KW immune suppression; immune stimulation; anti-inflammatory; leukaemia.
XX
XX Homo sapiens.
XX
XX WO200179449-A2.
XX
XX 25-OCT-2001.
XX
XX 16-APR-2001; 2001WO-US008656.
XX
XX 18-APR-2000; 2000US-00552929.
PR 26-JAN-2001; 2001US-00770160.
XX
XX (HYSE-) HYSEQ INC.
XX
XX Tang YT, Liu C, Drmanac RT;
XX
XX WPI; 2001-611725/70.
XX
XX Nucleic acids encoding a range of human polypeptides, useful in genetic
PT vaccination, testing and therapy.
XX
XX Claim 20; Page 678; 765pp; English.
XX
XX The invention relates to novel human secreted polypeptides. The
CC polypeptides and antibodies to the polypeptides are useful for
CC determining the presence of or predisposition to a disease associated
CC with altered levels of polypeptide. The polypeptides are also useful for
CC identifying agents (agonists and antagonists) that bind to them. Cells
CC expressing the proteins are useful for identifying a therapeutic agent
CC for use in treatment of a pathology related to aberrant expression or
CC physiological interactions of the polypeptide. Vectors comprising the
CC nucleic acids encoding the polypeptides and cells genetically engineered
CC to express them are also useful for producing the proteins. The proteins
CC are useful in genetic vaccination, testing and therapy, and can be used
CC as nutritional supplements. They may be used to increase stem cell
CC proliferation; to regulate haematopoiesis; and in bone, cartilage, tendon
CC and/or nerve tissue growth or regeneration; immune suppression and/or
CC stimulation; as anti-inflammatory agents; and in treatment of leukaemias.
CC AAU29510-AAU3304 represent the amino acid sequences of novel human
CC secreted proteins of the invention
XX
XX Sequence 2486 AA;
Query Match 7.7%; Score 82.5; DB 4; Length 2486;
Best Local Similarity 24.2%; Pred. No. 87;
Matches 39; Conservative 32; Mismatches 49; Indels 41; Gaps 7;
QY 45 TIDPMKVPDHADKFRHVGIVDFKGL-----AMNIEARGLKQKQKQ----- 88
DB 2238 TINPLCIEMYADK-ESRGVLEPGTVEIKFRKDLIKSMRIPAYKLMQEGPDLS 2296
QY 89 DANVKGEGIVKAHLIGVHDDIVSMEDYALYKGLDLHPT-----THVISDIQDFVVAL 142
DB 2297 DKDRKDLGRKAR-----EDLLLPYHQVAVQFADFDTPGRMLEKGVISDILEWKTAR 2351
QY 143 S-----LISDEGNTMTSFEVRQFANVNVHIGLSIL 175
DB 2352 TFLYWRRLRLLEDQ-----VKQEILOASGELSHVHIQSM 2387
RESULT 85
ABZ84649
ID ABZ84649 standard; protein; 2487 AA.
XX
XX ABZ84649;
XX
XX 11-FEB-2003 (first entry)
XX

DE Human SECP-1 protein from clone 7757335CD1 SEQ ID 1.

XX Secreted protein; SECP; human; antiarteriosclerotic; antiatherosclerotic;
KW hepatotropic; cytostatic; anti-HIV; antiatherogenic; antiasthmatic; cancer;
KW antianaemic; antidiabetic; antiinflammatory; neuroprotective; antiulcer;
KW antineumatic; antiarthritic; cardiac; antipotent; gonadal dysgenesis;
KW vasotropic; anticonvulsant; nocotropic; immunosuppressive; pericarditis;
KW antiparkinsonian; ophthalmological; cell proliferative disorder;
KW arteriosclerosis; atherosclerosis; cirrhosis; hepatitis; angina pectoris;
KW autoimmune disorder; AIDS; Crohn's disease; multiple sclerosis; epilepsy;
KW ulcerative colitis; cardiovascular disorder; myocardial infarction;
KW Raynaud's disease; myocardiitis; neurological disorder; cataract;
KW Huntington's disease; Alzheimer's disease; Creutzfeldt-Jakob disease;
KW developmental disorder; Duchenne muscular dystrophy; antipsoriatic;
KW Becker muscular dystrophy; Cushing's syndrome.

XX Homo sapiens.

XX WO200279441-A2.

XX 10-OCT-2002.

XX 29-MAR-2002; 2002WO-US009820.

XX 30-MAR-2001; 2001US-0280527P.

XX 06-APR-2001; 2001US-0282112P.

XX 09-APR-2001; 2001US-0282702P.

XX 13-APR-2001; 2001US-0283855P.

XX 19-OCT-2001; 2001US-0343718P.

XX 07-DEC-2001; 2001US-0339236P.

XX 13-FEB-2002; 2002US-0357002P.

XX (INCY-) INCYTE GENOMICS INC.

XX Baughn MR, Burford N, Ding L, Duggan BM, Elliott VS, Forsythe LJ;
PI Gandhi AR, Gietzen KJ, Griffin JA, He A, Honchell CD, Ison CH;
PI Lai PG, Lee EA, Lee S, Lu DAM, Mason PM, Sanjanwala MM;
PI Swarrakar A, Ramkumar J, Tang YT, Thangavelu K, Tran UK, Walia NK;
PI Warren BA, Yao MG, Xu Y, Yue H;

XX WPI; 2003-058429/05.

XX N-PSDB; ABS57545.

XX Novel human secreted protein useful for treating, preventing or
PT diagnosing cancer, hepatitis, psoriasis, asthma, diabetes mellitus,
PT anemia, epilepsy, cataract, Alzheimer's disease.

XX Claim 56; Page 143-149; 188pp; English.

XX This invention describes novel secreted proteins (SECP) which have
CC antiarteriosclerotic, antiatherosclerotic, hepatotropic, cytostatic, anti
CC -HIV, antiatherogenic, antiasthmatic, antianaemic, antidiabetic,
CC antiinflammatory, neuroprotective, antiulcer, antipotent, vasotropic,
CC antineumatic, antiarthritic, cardiac, antipotent, anticonvulsant,
CC notropic, immunosuppressive, antiparkinsonian and ophthalmological,
CC activity. The polynucleotides and polypeptides of the invention can be
CC used for diagnosing, treating or preventing cell proliferative disorder
CC e.g. arteriosclerosis, atherosclerosis, cirrhosis, hepatitis, cancer,
CC autoimmune/inflammatory disorders e.g. acquired immunodeficiency syndrome
CC (AIDS), allergies, asthma, anaemia, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, ulcerative colitis, psoriasis, rheumatoid arthritis,
CC etc; cardiovascular disorder e.g. myocardial infarction, angina pectoris,
CC hypertension, Raynaud's disease, myocardiitis, pericarditis, etc;
CC neurological disorders e.g. epilepsy, Huntington's disease, Parkinson's
CC disease, Alzheimer's disease, Creutzfeldt-Jakob disease, etc; and
CC developmental disorders e.g. Duchenne and Becker muscular dystrophy,
CC cataract, gonadal dysgenesis, Cushing's syndrome, etc. The products of
CC the invention can also be used for drug screening, proteome analysis,
CC microarrays creating knock-in humanised animals or transgenic animals to
CC model human diseases, in somatic or germline gene therapy, to generate a
CC transcript image of a tissue or cell type, for detecting differences in
CC the chromosomal location due to translocation, inversion, etc., among
CC normal, carrier or affected individuals, and as hybridization probes for

CC mapping naturally occurring genomic sequences.. ABB84649-ABB84673
CC represent secreted proteins encoded by the cDNA's shown in ABS57545-
XX ABS57569, described in the disclosure of the invention

XX Sequence 2487 AA;

Query Match 7.7%; Score 82.5; DB 6; Length 2487;

Best Local Similarity 24.2%; Pred. No. 87;

Matches 39; Conservative 32; Mismatches 49; Indels 41; Gaps 7;

QY 45 TIDPMKVPDCHADKFERHVGIVDFKGL-----AMNTEARGLKQMKRQ----- 88
Db 2239 TINFLEIEMVADK-ESRGVLEPBGTVIEIKFRKDKLIKSMRIDPAYKLMELQGEPLDS 2297
QY 89 DANVKGEGIVKAHLIGVDDIVSMYEDLAYKLGDLHPT-----THVISDLODFVAL 142
Db 2298 DKDRKLEGRUKAR-----EDLLPIYHQVAVQPADFHDPGRMLEKGVISDILEWTKAR 2352
QY 143 S-----LEISDEGNITMTSFVRQFANVNVHIGLSIL 175
Db 2353 TFLYWRLLRLLEDDQ-----VKQILQASGELSHVHIQSM 2388

RESULT 86

ABU65149

ID ABU65149 standard; protein; 2498 AA.

XX AC ABU65149;

XX DT 20-MAY-2003 (first entry)

XX DE Human NOV76a protein.

XX KW NOX; cytostatic; cardiac; antiarteriosclerotic; antiasthmatic; cancer;
KW hypotensive; cardiomyopathy; bronchial asthma; gene therapy; vaccine;
XX human.

XX OS Homo sapiens.

XX PN WO200272757-A2.

XX PD 19-SEP-2002.

XX PF 08-MAR-2002; 2002WO-US006908.

XX PR 08-MAR-2001; 2001US-0274101P.

XX PR 08-MAR-2001; 2001US-0274194P.

XX PR 08-MAR-2001; 2001US-0274281P.

XX PR 08-MAR-2001; 2001US-0274322P.

XX PR 09-MAR-2001; 2001US-0274849P.

XX PR 12-MAR-2001; 2001US-0275235P.

XX PR 13-MAR-2001; 2001US-0275578P.

XX PR 13-MAR-2001; 2001US-0275579P.

XX PR 14-MAR-2001; 2001US-0275601P.

XX PR 16-MAR-2001; 2001US-0276000P.

XX PR 19-MAR-2001; 2001US-0276776P.

XX PR 20-MAR-2001; 2001US-0277239P.

XX PR 20-MAR-2001; 2001US-0277321P.

XX PR 21-MAR-2001; 2001US-0277791P.

XX PR 22-MAR-2001; 2001US-0277833P.

XX PR 23-MAR-2001; 2001US-0278152P.

XX PR 26-MAR-2001; 2001US-0278894P.

XX PR 27-MAR-2001; 2001US-0278999P.

XX PR 28-MAR-2001; 2001US-0279036P.

XX PR 30-MAR-2001; 2001US-0279344P.

XX PR 30-MAR-2001; 2001US-0277338P.

XX PR 30-MAR-2001; 2001US-0279995P.

XX PR 02-APR-2001; 2001US-0280233P.

XX PR 02-APR-2001; 2001US-0280802P.

XX PR 02-APR-2001; 2001US-0280900P.

QY 84 MKRQGDANVKGREGIVKAHLIGVHDDIVSMYDLAYKGLDHLPT-THVISDIQDFVVAL 142
 Db 131 VKRE-----KGQGL-----DILNQYLDYPTRVHPQSH--SDIDTLILKL 172
 QY 143 SLEISDEGNITMTSFEVRQFANVNHIGLSILDPFGVLSVLTAFQDTRKEMTKVL 202
 Db 173 AQOY--HAHVITTDNFL-----NKVCHVQGITALN-----VNDLSEAIKPNVHQGLSIL 221
 QY 203 APAFKRE 209
 Db 222 LTKIGKE 228

RESULT 88
 ID ABM72477 standard; protein; 357 AA.
 XX AC ABM72477;
 XX DT 20-NOV-2003 (first entry)
 XX DE Staphylococcus aureus protein #1717.
 XX KW Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;
 KW enzymatic assay; antibiotic target.
 XX OS Staphylococcus aureus.
 XX PN WC200294868-A2.
 XX PD 28-NOV-2002.
 XX PF 27-MAR-2002; 2002WO-IB002637.
 XX PR 27-MAR-2001; 2001GB-00007661.
 XX PA (CHIR-) CHIRON SPA.
 XX PI Massignani V, Mora M, Scarselli M;
 XX WPI; 2003-120786/11.
 XX DR N-PSDB; ACP74037.
 XX PT New Staphylococcus aureus protein, useful as a vaccine for treating or
 PT preventing Staphylococcal infection, specifically an infection caused by
 PT S. aureus, e.g. sepsis.
 XX PS Claim 1; SEQ ID NO 3434; 49pp; English.
 XX CC The invention relates to novel genes and encoded proteins from
 CC Staphylococcus aureus. A composition comprising the S. aureus protein, a
 CC nucleic acid encoding the protein, or an antibody to the protein, is
 CC useful as a pharmaceutical, particularly as a vaccine for treating or
 CC preventing infection due to Staphylococcus bacteria, specifically an
 CC infection caused by S. aureus. The composition is particularly useful for
 CC treating or preventing sepsis in a patient. The composition can also be
 CC used for diagnostics. The protein is also used in an assay for enzymatic
 CC studies and as a target for antibiotics. This sequence represents one of
 CC the novel S. aureus proteins of the invention
 XX SQ Sequence 357 AA;

Query Match 7.7%; Score 82; DB 6; Length 357;
 Best Local Similarity 23.9%; Pred. No. 6.2;
 Matches 32; Conservative 25; Mismatches 51; Indels 26; Gaps 6;

QY 89 DANVKGREGIVKAHLIGVHDDIVSMY-----YDLAYKGLDHLPT-THVISDI 135
 Db 183 DGNILIPQGVNELQIVADSNDSVKREKREGLDILNELYDLDYPTKVIHPTKTH--SDI 240
 QY 136 QDFVVALSLEISDEGNITMTSFEVRQFANVNHIGLSILDPFGVLSVLTAFQDTR 195
 Db 241 DTMLKLAKQY--HASTITDNL-----NKVCHVGIKALN-----VNDLSEAIKPNVHQ 289

QY 196 KEMTKVLAPAFKRE 209
 Db 290 GDQLHILLTKYKGE 303

RESULT 89
 ID ABP39212 standard; protein; 362 AA.
 XX AC ABP39212;
 XX DT 24-JUL-2002 (first entry)
 XX DE Staphylococcus epidermidis ORF amino acid sequence SEQ ID NO:4057.
 XX KW Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
 KW antibacterial; gene therapy.
 XX OS Staphylococcus epidermidis.
 XX PN US6380370-B1.
 XX PD 30-APR-2002.
 XX PF 13-AUG-1998; 98US-00134001.
 XX PR 14-AUG-1997; 97US-0055779P.
 XX PR 08-NOV-1997; 97US-0064964P.
 XX PA (GENO-) GENOME THERAPEUTICS CORP.
 XX PI Doucette-Stamm LA, Bush D;
 XX WPI; 2002-381255/41.
 XX DR N-PSDB; ABN91757.
 XX PT Novel isolated nucleic acid encoding a Staphylococcus epidermis
 PT polypeptide, useful for diagnosing and treating bacterial infections.
 XX PS Disclosure; SEQ ID NO 4057; 267pp; English.
 XX CC ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading
 CC frame (ORF) nucleic acid sequences which encode the amino acid sequences
 CC given in ABP3124 to ABP37960. The S. epidermidis sequences have
 CC antibacterial activity and can be used in gene therapy. The sequences can
 CC also be used in the diagnosis and treatment of bacterial infections,
 CC particularly S. epidermidis infections. The sequences can be used to
 CC screen for compounds able to interfere with the S. epidermidis life cycle
 CC or inhibit S. epidermidis infection. N.B. The sequence data for this
 CC patent did not form part of the printed specification, but was obtained
 CC in electronic format directly from the USPTO web site
 XX SQ Sequence 362 AA;

Query Match 7.7%; Score 82; DB 5; Length 362;
 Best Local Similarity 24.4%; Pred. No. 6.4;
 Matches 31; Conservative 27; Mismatches 39; Indels 30; Gaps 7;

QY 84 MKRQGDANVKGREGIVKAHLIGVHDDIVSMYDLAYKGLDHLPT-THVISDIQDFVVAL 142
 Db 216 VKRE-----KGQGL-----DILNQYLDYPTRVHPQSH--SDIDTLILKL 257
 QY 143 SLEISDEGNITMTSFEVRQFANVNHIGLSILDPFGVLSVLTAFQDTRKEMTKVL 202
 Db 258 AQOY--HAHVITTDNFL-----NKVCHVQGITALN-----VNDLSEAIKPNVHQGLSIL 306
 QY 203 APAFKRE 209
 Db 307 LTKIGKE 313

RESULT 90

AAV35476
 ID AAV35476 standard; protein; 397 AA.
 XX
 AC AAV35476;
 XX
 DT 17-OCT-2003 (revised)
 DT 13-SEP-1999 (first entry)
 XX
 DE Chlamydia pneumoniae transmembrane protein sequence.
 XX
 KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
 KW neutralising epitope.
 XX
 OS Chlamydia pneumoniae.
 XX
 PN WO9927105-A2.
 XX
 PD 03-JUN-1999.
 XX
 PF 20-NOV-1998; 98WO-IB001890.
 XX
 PR 21-NOV-1997; 97FR-00014673.
 PR 04-NOV-1998; 98US-0107078P.
 XX
 XX (GEST) GENSET.
 PA
 XX Griffais R;
 PI
 DR WPI; 1999-357842/30.
 XX
 PT Genome sequence of Chlamydia pneumoniae.
 XX
 PS Page 1240-1241; Disclosure; 1912pp; English.
 XX
 CC AAV34584-Y35879 represent the proteins encoded by all the open reading
 CC frames in the complete genome (see AAX91990) of Chlamydia pneumoniae. C.
 CC pneumoniae causes respiratory disease such as pneumonia and bronchitis.
 CC and is thought to be a contributing factor in heart disease, sarcoidosis,
 CC sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The
 CC polypeptides encoded by the open reading frames of the C. pneumoniae
 CC genome (see AAV34584-Y35879) can be used in immunogenic compositions as
 CC vaccines. Vectors containing C. pneumoniae nucleotide sequences can also
 CC be used as immunogenic compositions, especially where the vector directs
 CC the expression of a neutralising epitope of C. pneumoniae. (Updated on 17
 CC -OCT-2003 to standardise OS field)
 XX
 SQ Sequence 397 AA;
 Query Match 7.7%; Score 82; DB 2; Length 397;
 Best Local Similarity 20.4%; Pred. No. 7.2;
 Matches 46; Conservative 44; Mismatches 69; Indels 66; Gaps 11;
 QY 23 DKITEE-----INKAIDDAIAAISOSETIDPMKVPDHADKPE-----RH 61
 Db 155 NKFTKQGIIRILTKA---SISAIEESQNVRTVNDQVEEDYVLAIGROFNNTASIGLDN 211
 QY 62 VGIV-DFKGELAMNIEARGLKQMKROGD-----ANVKGEEGIVKAHLILGVHDDIVS 113
 Db 212 AGVIRDRGVIPVDETWRVTPNVIYAGDITGKLLAHVASHQGVIAAKNISGHE---V 268
 QY 114 MEYDLAYKGLDHPHTTHVISDIQDFVALSLEISDEGNI--TMTSFEVRQ-----161
 Db 269 MDYSAIPSVIFTHP-----ETAMVGLSLQEAEOQNLPKLTFFPKFAIGKAVALGAS 320
 QY 162 --FANVNH-----IGGLSILDRIFGVLSDVLTALFQDVTVRKEMT 199
 Db 321 DGFAAIVSHEITQOILGAYVIGPHASSLIGEMTL-----AIRNELT 361
 RESULT 91
 AAB62188
 ID AAB62188 standard; protein; 461 AA.

XX AAB62188;
 AC
 XX 11-SEP-2003 (revised)
 DT 11-JUN-2001 (first entry)
 XX
 DE C. pneumoniae lpda protein.
 XX
 KW Chlamydia; lpda; infection; diagnostic; medicament; vaccine;
 KW gene therapy; antibacterial.
 XX
 OS Chlamydia pneumoniae.
 XX
 PN WO200121802-A1.
 XX
 PD 29-MAR-2001.
 XX
 PF 15-SEP-2000; 2000WO-CA001086.
 XX
 PR 17-SEP-1999; 99US-0154325P.
 XX
 PA (AVET) AVENTIS PASTEUR LTD.
 XX
 PI Murdin AD, Oomen RP, Wang J, Dunn P;
 XX
 DR WPI; 2001-257992/26.
 DR N-PSDB; AAF57425.
 XX
 PT Novel Chlamydia pneumoniae lpda protein and polynucleotides encoding them
 PT useful as component of vaccines for treating Chlamydia infections, and
 PT for detecting Chlamydia infection in the body fluid of a mammal.
 XX
 XX Claim 16; Fig 1; 78pp; English.
 XX
 CC This represents the Chlamydia pneumoniae lpda protein. The lpda protein
 CC can be expressed by standard recombinant methodology. The lpda protein,
 CC polynucleotide and antibodies specific to the protein and vaccines
 CC comprising the lpda protein are useful for preventing or treating
 CC Chlamydia (C. trachomatis, C. psittaci, C. pneumoniae or C. pecorum)
 CC infection. Vaccine vectors, and the lpda protein are useful in the
 CC preparation of medicaments for preventing and/or treating Chlamydia
 CC infection. Primers and probes derived from the lpda gene are also useful
 CC for detecting and/or identifying Chlamydia in the biological material.
 CC (Updated on 11-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 461 AA;
 Query Match 7.7%; Score 82; DB 4; Length 461;
 Best Local Similarity 20.4%; Pred. No. 9;
 Matches 46; Conservative 44; Mismatches 69; Indels 66; Gaps 11;
 QY 23 DKITEE-----INKAIDDAIAAISOSETIDPMKVPDHADKPE-----RH 61
 Db 219 NKFTKQGIIRILTKA---SISAIEESQNVRTVNDQVEEDYVLAIGROFNNTASIGLDN 275
 QY 62 VGIV-DFKGELAMNIEARGLKQMKROGD-----ANVKGEEGIVKAHLILGVHDDIVS 113
 Db 276 AGVIRDRGVIPVDETWRVTPNVIYAGDITGKLLAHVASHQGVIAAKNISGHE---V 332
 QY 114 MEYDLAYKGLDHPHTTHVISDIQDFVALSLEISDEGNI--TMTSFEVRQ-----161
 Db 333 MDYSAIPSVIFTHP-----ETAMVGLSLQEAEOQNLPKLTFFPKFAIGKAVALGAS 384
 QY 162 --FANVNH-----IGGLSILDRIFGVLSDVLTALFQDVTVRKEMT 199
 Db 385 DGFAAIVSHEITQOILGAYVIGPHASSLIGEMTL-----AIRNELT 425
 RESULT 92
 ABB94271
 ID ABB94271 standard; protein; 461 AA.
 XX
 AC ABB94271;

XX 28-MAR-2001; 2001US-0279495P.
 PR 21-MAY-2001; 2001US-0292544P.
 PR 08-AUG-2001; 2001US-0310801P.
 PR 01-OCT-2001; 2001US-0326370P.
 PR 04-DEC-2001; 2001US-0336780P.
 PR 20-FEB-2002; 2002US-0358985P.
 XX (ZYCO-) ZYCOS INC.
 XX Chicx RM, Tomlinson AJ, Urban RG;
 XX WPI; 2003-040607/03.
 XX New polypeptides (e.g. kinases, phosphatases, proteases, transporters,
 PT cytoskeletal proteins, receptors or transcription factors), useful for
 PT treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
 PT leukemia.
 XX Example 2; SEQ ID NO 1218; 134pp; English.
 XX The invention describes a purified polypeptide, which comprises a
 CC fragment of a kinase, phosphatase, protease, protease inhibitor,
 CC transporter, cytoskeletal protein, receptor or transcription factor. The
 CC polypeptide is useful as an immunogenic composition for eliciting in a
 CC mammal an immunogenic response directed against any of the purified
 CC polypeptide. The purified polypeptide, or the antibody that binds to this
 CC polypeptide, is useful for treating cancer. The polypeptide is also
 CC useful for identifying compounds that binds to a naturally processed
 CC class I or class II MHC-binding polypeptide. The polypeptides and
 CC polynucleotides are particularly useful for treating or preventing
 CC myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,
 CC lymphoma or leukemia. These are also useful for screening agents for
 CC treating the above mentioned diseases. This sequence represents an
 CC expressed protein tag (EFT) isolated from human tissue for translational
 CC profiling. Note: This sequence does not appear in the printed
 CC specification but was obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 487 AA;

Query Match 7.7%; Score 82; DB 6; Length 487;
 Best Local Similarity 20.7%; Pred. No. 9.7;
 Matches 48; Conservative 46; Mismatches 80; Indels 58; Gaps 11;
 QY 5 LLIAAFAVAADPIHYDKITEE-INKAIDDAIAAEQSETIDPMKVPDHADKFE-RHV 62
 Db 20 VLVAIGTAVTAANPGVWVVISQKGLDYASQOQTALQKE--LKRIKIPDYSDFKIKHL 77
 QY 63 GIVDFKGLAMRNIEAR-----GLKQKRGQDANVKGEGIVKHAHLIGV 107
 Db 78 G-----KGHYGFYSMDIREFOLPSSQISWPNVGLKFSISNANIKISGKKAQKRFKMG 133
 QY 108 HDDI-----VSMEDYDLAYKGLDHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEVRQFA 163
 Db 134 NFDLSIEGMSISADL--KLAS-NFTS-----GKPIITCSSCSHSI 170
 QY 164 NVVN-HIGGLSI-----LDPIFGVLSVLTALFOQTVKEMTKVLAPAK 207
 Db 171 NSVHVHISGSDVGMVLIQLFHNQIESALQNVAWSQVCEMTNVSVDLQPYFQ 222

RESULT 96
 AAY36857
 ID AAY36857 standard; protein; 530 AA.
 XX AC AAY36857;
 XX DT 07-OCT-1999 (first entry)
 XX DE Protein involved in intermediate metabolism of nucleic acids.
 XX KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;

KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis;
 XX bartholinitis; pneumonia; venereal lymphogranulomatosis.
 OS Chlamydia trachomatis.
 PN WO9928475-A2.
 XX 10-JUN-1999.
 XX 27-NOV-1998; 98WO-IB001939.
 XX 28-NOV-1997; 97FR-00015041.
 PR 17-DEC-1997; 97FR-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX (GEST) GENSET.
 PA Griffais R;
 PI WPI; 1999-371125/31.
 DR Genome sequence of Chlamydia trachomatis.
 PT Disclosure; Page 731; 1755pp; English.
 PS AAY36754-Y37949 are encoded by open reading frames (ORFs) of the genome
 CC of Chlamydia trachomatis (see AA201425). The polypeptides can be used as
 CC vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences
 CC can also be used to control growth of the microorganism. Chlamydia
 CC trachomatis is responsible for a large number of diseases, e.g. eye
 CC diseases such as conventional trachoma, nonendemic trachoma, such as
 CC paratrachoma, and inclusion conjunctivitis; genital diseases, such as
 CC nongonococcal urethritis, epididymitis, cervicitis, salpingitis,
 CC perihepatitis, bartholinitis; pneumonia; venereal lymphogranulomatosis; and
 CC venereal lymphogranulomatosis. The polypeptides of the invention may be
 CC of use in treating these diseases
 XX SQ Sequence 530 AA;

Query Match 7.7%; Score 82; DB 2; Length 530;
 Best Local Similarity 21.6%; Pred. No. 11;
 Matches 45; Conservative 32; Mismatches 73; Indels 58; Gaps 9;
 QY 18 DPIHYDKITEE-INKAIDDAIAAEQSETIDPMKVPDHADK---FEHVGVDFKGLA 72
 Db 3 EPLYLQIRISYPLYNKSIHSHN-SHVPMSITSPPIEVSVLTDSIKNLEKNFLRVVVKGLS 61
 QY 73 MNIEARGLKQKRGQDANVKGEGIVKHAHLIGVHDD-----IVSMEYDLYAYKL 122
 Db 62 NVSLQTSQ-----HLYFALKDSKAVLINGAFFFHRSKYFDRKPKD 100
 QY 123 GD---LHPTTHVISDIQDF-VVALSLEISDEGNITMTSFEVRQFANVNVNHHIGGLSILDP- 177
 Db 101 GDVYVILHGLKLTYPAGQYQIVAVALTSGEGNL-----LQQFEERKQRLAAEGYFDPK 154
 QY 178 -----IFGVLSVDVLTALFOQTVR 195
 Db 155 RKKLPLPSGARVIGVITSPGAVIQDILR 182

RESULT 97
 AAB94022
 ID AAB94022 standard; protein; 767 AA.
 XX AC AAB94022;
 XX DT 26-JUN-2001 (first entry)
 XX DE Human protein sequence SEQ ID NO:14155.
 XX KW Human; primer; detection; diagnosis; antisense therapy; gene therapy.

OS Homo sapiens.
 XX PF 07-FEB-2001.
 XX 28-JUL-2000; 2000EP-00116126.
 XX 29-JUL-1999; 99JP-00248036.
 XX 27-AUG-1999; 99JP-00300253.
 XX 11-JAN-2000; 2000JP-00118776.
 XX 02-MAY-2000; 2000JP-00183767.
 XX 09-JUN-2000; 2000JP-00241899.
 XX (HELI-) HELIX RES INST.
 XX Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
 PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
 DR WPI; 2001-318749/34.
 XX Primer sets for synthesizing polynucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs.
 XX Claim 8; SEQ ID NO 14155; 2537pp + Sequence Listing; English.
 XX The present invention describes primer sets for synthesizing 5602 full-length cDNAs defined in the specification. Where a primer set comprises: (a) an oligo-dr primer and an oligonucleotide complementary to the complementary strand of a polynucleotide which comprises one of the 5602 nucleotide sequences defined in the specification, where the oligonucleotide comprises at least 15 nucleotides; or (b) a combination of an oligonucleotide comprising a sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end sequence and an oligonucleotide comprising a sequence complementary to a polynucleotide which comprises a 3'-end sequence, where the oligonucleotide comprises at least 15 nucleotides and the combination of the 5'-end sequence/3'-end sequence is selected from those defined in the specification. The primer sets can be used in antisense therapy and in gene therapy. The primers are useful for synthesizing polynucleotides, particularly full-length cDNAs. The primers are also useful for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893 represent human amino acid sequences; and AAH13629 to AAH13632 represent oligonucleotides, all of which are used in the exemplification of the present invention
 XX Sequence 767 AA;
 SQ
 Query Match 7.7%; Score 82; DB 4; Length 767;
 Best Local Similarity 22.9%; Pred. No. 18;
 Matches 36; Conservative 30; Mismatches 55; Indels 36; Gaps 8;
 QY 15 VSADPIHYDKITEINKAIDDAIAAEQSETIDPMKVPDHA-DKFERHVGIV---DFKGE 70
 DB 543 VSAEKVVK---THSVNGITEADPTIYSGKVIPLRSVDPQTNEYQGMIEIVEEGDMKGE 599
 QY 71 LAMENIEARGLKQMKROGDANVKEGEGIVKAHLIGVHDDIVSMEDLA----- 119
 DB 600 -----VYPPFGIVGMANGDCLQKGES--VKFQLCV-LGQNAQTMAYNITPLRRATVECVK 651
 QY 120 -----YKLGDLHPHTTHVSDIQDFVALSLSDISDE 149
 DB 652 DQFGFINVEGDSKLLFFHKEVQD---GIELQAGDE 685
 RESULT 98
 AAB94036
 ID AAB94036 standard; protein; 767 AA.

QY 120 -----YKLGDLHPHTTHVISIDQDFVVALSLEISDE 149
 Db 652 DQGFNYEVDGSKLFFHVKVQD---GIELQAGDE 685

RESULT 99

AAG91691
 ID AAG91691 standard; protein; 785 AA.

XX AAG91691;

XX 26-SEP-2001 (first entry)

XX C glutamicum protein fragment SEQ ID NO: 5445.

XX Coryneform bacterium; amino acid synthesis; vitamin; saccharide;
 KW organic acid synthesis.

XX Corynebacterium glutamicum.

XX EPI108790-A2.

XX 20-JUN-2001.

XX 18-DEC-2000; 2000EP-00127688.

XX 16-DEC-1999; 99JP-00377484.

PR 07-APR-2000; 2000JP-00159162.

XX 03-AUG-2000; 2000JP-00280988.

XX (KYOWA) KYOWA HAKKO KOGYO KK.

XX Nakagawa S, Mizoguchi H, Ando S, Hayashi M, Ochiai K, Yokoi H;

PI Tateishi N, Senoh A, Ikeda M, Ozaki A;

XX WPI; 2001-376931/40.

XX N-PSDB; AAH66910.

XX Novel polynucleotides derived from Coryneform bacteria, for identifying
 PT mutation point of a gene, measuring expression of a gene, analyzing
 PT expression profile or pattern of a gene and identifying homologous gene.

XX Claim 17; SEQ ID NO 5445; 246pp + Sequence Listing; English.

XX The present invention provides a number of nucleotide and protein
 CC sequences from the Coryneform bacterium Corynebacterium glutamicum. These
 CC are useful for identifying the mutation point of a gene derived from a
 CC mutant of coryneform bacterium, measuring expression amount and analysing
 CC the expression profile or expression pattern of a gene derived from
 CC Coryneform bacterium, and identifying a homologue of a gene derived from
 CC Coryneform bacterium. Coryneform bacteria are useful for producing amino
 CC acids, nucleic acids, vitamins, saccharides and organic acids.
 CC particularly L-lysine. The present sequence is a protein described in the
 CC exemplification of the invention. Note: The sequence data for this patent
 CC did not form part of the printed specification, but was obtained in
 CC electronic format directly from the European Patent Office

XX Sequence 785 AA;

Query Match 7.7%; Score 82; DB 4; Length 785;

Best Local Similarity 23.6%; Pred. No. 19; Indels 86; Gaps 17;
 Matches 63; Conservative 38; Mismatches 80;

QY 7 IAAVAFVAVSADPI--HYDKITE-EINKAIDDAIAAEQSETIDPMKVPDH-ADKPERHV 62

Db 58 IAVLSFTNAAADNITAKNDKVTSMISKVHEIVA-----HMFDPDHEISTIDTI 107

QY 63 GIUDPK-GELAMEN---IEARGL--KOMKQGDANVKGEIGVKAHL--LIGVHDDI--V 112

Db 108 NTLIDIEYGDQWTSYDIQLEDLLYKVTQGGNALTALSFVESHTEAFISVLDQIKOT 167

QY 113 SME-----YDLAYKGLDLH--PPTHVISIDQ-----FVVAL-----SLEISDEGN 151

Db 168 SLELEIICVLLDKLIEPHASPKYLIIDEVQDQNSVFEFVALRPAAKHNTSLVLVDSS 227
 QY 152 ITMTSF-----EVROFANV-----VNHHIGLSIL 175
 Db 228 QTYEFSRANPKALNSLEASGVFGTYRLTTNYSRQNEILDPAFHLSDEANQFAGIQLY 287
 QY 176 DPITGVLSDLTA-IFQDTVRKENTKV 201
 Db 288 ANSF-----DAPTADSFKEKVELDMHHV 310

RESULT 100

ABBS58783
 ID ABBS58783 standard; protein; 227 AA.

XX ABBS58783;

XX 26-MAR-2002 (first entry)

XX Drosophila melanogaster polypeptide SEQ ID NO 3141.

XX Drosophila; developmental biology; cell signalling; insecticide;
 KW pharmaceutical.

XX Drosophila melanogaster.

XX WO200171042-A2.

XX 27-SEP-2001.

XX 23-MAR-2001; 2001WO-US009231.

XX 23-MAR-2000; 2000US-0191637P.

PR 11-JUL-2000; 2000US-00614150.

XX (PEKE) PE CORP NY.

XX Venter JC, Adams M, Li PWD, Myers EW;

XX WPI; 2001-656860/75.

XX N-PSDB; ABL02886.

XX New isolated nucleic acid detection reagent for detecting 1000 or more
 PT genes from Drosophila and for elucidating cell signalling and cell-cell
 PT interactions.

XX Disclosure; SEQ ID NO 3141; 21pp + Sequence Listing; English.

XX The invention relates to an isolated nucleic acid detection reagent
 CC capable of detecting 1000 or more genes from Drosophila. The invention is
 CC useful in developmental biology and in elucidating cell signalling and
 CC cell-cell interactions in higher eukaryotes for the development of
 CC insecticides, therapeutics and pharmaceutical drugs. The invention
 CC discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
 CC sequences (ABL01840-ABL16175) and the encoded proteins (ABBS57737-
 CC ABB72072). The sequence data for this patent did not form part of the
 CC printed specification, but was obtained in electronic format directly
 CC from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 227 AA;

Query Match 7.6%; Score 81.5; DB 4; Length 227;

Best Local Similarity 22.5%; Pred. No. 3.7; Indels 21; Gaps 5;
 Matches 36; Conservative 29; Mismatches 74;

QY 27 BEINKAIDDAIAAEQSQS-----ETIDPW---KVPDHADKFERHVGIVDFKGEI 74

Db 40 HELNEAGRSKLSAIRKSTIERLDDWARDTADSAIANEVDHDDHRSKTIQAIFKANVSTML 99

QY 75 NTEARGLKOMKQGDANVKGEIGVKAHLIGVHD--DIVSNEYDYLAKGLGLPHTTIVI 132

Db 100 EIEKANREBELMA-----ITGESELRQRTTTRARHNGQSLVSGQENDVTEKM--LAISRHL 152

us-10-024-955-7.rag

Qy 133 SDIQDFWALSLEISDEGNIITMTSFEVROFANVVNHIGGL 172
Db 153 ETTQKSAITETLVASSONVATSDELHHTAGSISMSGKL 192

Search completed: August 6, 2004, 16:00:31
Job time : 60 secs

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OM protein - protein search, using sw model

Run on: August 6, 2004, 15:59:26 ; Search time 19 Seconds
(without alignments)
578.754 Million cell updates/sec

Title: US-10-024-955-7

Perfect score: 1068

Sequence: 1 MMKFLIIAAVAFVAVSADPI.....VRKENTKVLAPAFKRELEKN 213

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database : Issued Patents AA.*

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4: /cgn2_6/ptcdat2/iaa/6B COMB.pep.*

5: /cgn2_6/ptcdat2/iaa/PCITUS COMB.pep.*

6: /cgn2_6/ptcdat2/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1068	100.0	213	4	US-08-553-336A-7
2	962	90.1	215	4	US-08-553-336A-2
3	959	89.8	215	3	US-08-462-778-2
4	90	8.4	1786	3	US-08-973-462-8
5	88.5	8.3	439	1	US-08-336-618-12
6	88.5	8.3	439	1	US-08-336-618-26
7	88	8.2	393	4	US-09-393-858-2
8	88	8.2	436	4	US-09-393-858-5
9	86	8.1	415	4	US-09-252-991A-22392
10	84.5	7.9	294	1	US-08-479-017-9
11	84.5	7.9	294	3	US-08-479-017-9
12	84.5	7.9	823	4	US-09-134-001C-4081
13	84	7.9	314	4	US-09-498-520A-34
14	84	7.9	410	4	US-09-673-395A-197
15	84	7.9	649	4	US-09-489-039A-14142
16	83	7.8	583	4	US-09-107-532A-5678
17	83	7.8	845	4	US-09-565-501A-110
18	83	7.8	845	4	US-09-639-206A-110
19	83	7.8	845	4	US-09-874-923-110
20	82	7.7	362	4	US-09-134-001C-4057
21	82	7.7	397	4	US-09-198-452A-894
22	81.5	7.6	547	4	US-08-461-722-2
23	81.5	7.6	547	4	US-08-336-251-2
24	81.5	7.6	547	4	US-09-468-041-2
25	81.5	7.6	547	5	PCT-US94-06362-2
26	81.5	7.6	548	2	US-08-457-822-32
27	81.5	7.6	548	3	US-09-472-971-3

28	81.5	7.6	548	3	US-08-432-697-32	Sequence 32, Appl
29	81.5	7.6	548	3	US-08-466-248-32	Sequence 32, Appl
30	81	7.6	385	4	US-09-570-778A-12	Sequence 12, Appl
31	81	7.6	385	4	US-09-991-138-12	Sequence 12, Appl
32	81	7.6	470	4	US-09-673-395A-561	Sequence 561, App
33	80.5	7.5	255	4	US-09-107-532A-4850	Sequence 4850, Ap
34	80.5	7.5	374	4	US-09-489-039A-8512	Sequence 8512, Ap
35	80.5	7.5	338	4	US-09-252-991A-19476	Sequence 19476, A
36	80	7.5	1504	4	US-09-252-991A-26608	Sequence 26608, A
37	80	7.5	1792	4	US-09-561-818A-12	Sequence 12, Appl
38	80	7.5	1816	4	US-09-561-818A-10	Sequence 10, Appl
39	79.5	7.4	458	1	US-08-336-618-24	Sequence 24, Appl
40	79.5	7.4	557	4	US-09-543-681A-6606	Sequence 6606, Ap
41	79.5	7.4	906	1	US-08-094-889-1	Sequence 1, Appli
42	79	7.4	400	4	US-09-252-991A-27391	Sequence 27391, A
43	79	7.4	593	4	US-09-252-991A-32411	Sequence 32411, A
44	79	7.4	768	4	US-09-252-991A-23008	Sequence 23008, A
45	78.5	7.4	166	4	US-09-134-000C-3522	Sequence 3522, Ap
46	78.5	7.4	437	4	US-09-134-000C-6150	Sequence 6150, Ap
47	78.5	7.4	672	3	US-09-040-843-4	Sequence 4, Appli
48	78.5	7.4	672	4	US-09-621-855-4	Sequence 4, Appli
49	78.5	7.4	866	3	US-09-040-843-2	Sequence 2, Appli
50	78.5	7.4	866	4	US-09-621-855-2	Sequence 2, Appli
51	78	7.3	511	4	US-09-489-039A-7682	Sequence 7682, Ap
52	78	7.3	516	4	US-09-252-991A-19045	Sequence 19045, A
53	78	7.3	1012	1	US-08-219-262B-7	Sequence 7, Appli
54	78	7.3	1012	1	US-08-219-262B-8	Sequence 8, Appli
55	78	7.3	1012	3	US-09-031-655-7	Sequence 7, Appli
56	78	7.3	1012	3	US-09-031-655-8	Sequence 8, Appli
57	77.5	7.3	166	4	US-09-107-532A-5004	Sequence 5004, Ap
58	77.5	7.3	409	4	US-09-252-991A-31003	Sequence 31003, A
59	77.5	7.3	946	3	US-09-074-579-3	Sequence 3, Appli
60	77.5	7.3	946	3	US-09-388-774-3	Sequence 3, Appli
61	77.5	7.3	1233	4	US-09-388-352-5704	Sequence 5704, Ap
62	77.5	7.3	1480	4	US-09-425-453A-8	Sequence 8, Appli
63	77.5	7.3	1480	4	US-09-425-453A-18	Sequence 18, Appli
64	77	7.2	1012	1	US-08-219-262B-3	Sequence 3, Appli
65	77	7.2	1012	1	US-08-219-262B-5	Sequence 5, Appli
66	77	7.2	1012	2	US-08-708-541A-30	Sequence 30, Appli
67	77	7.2	1012	3	US-09-031-655-3	Sequence 3, Appli
68	77	7.2	1012	3	US-09-031-655-5	Sequence 5, Appli
69	77	7.2	1012	4	US-09-147-771-30	Sequence 30, Appli
70	76.5	7.2	429	4	US-09-107-532A-3785	Sequence 3785, Ap
71	76	7.1	164	4	US-09-107-532A-6514	Sequence 6514, Ap
72	76	7.1	645	4	US-09-252-991A-22095	Sequence 22095, A
73	76	7.1	1196	4	US-09-107-532A-3944	Sequence 3944, Ap
74	75.5	7.1	423	4	US-09-252-991A-21128	Sequence 21128, A
75	75.5	7.1	441	4	US-09-328-322-5426	Sequence 5426, Ap
76	75.5	7.1	608	4	US-09-134-000C-4810	Sequence 4810, Ap
77	75.5	7.1	696	4	US-09-252-991A-16965	Sequence 16965, A
78	75.5	7.1	1012	1	US-07-944-943-2	Sequence 2, Appli
79	75.5	7.1	1012	1	US-07-944-525-2	Sequence 2, Appli
80	75.5	7.1	1012	1	US-08-219-262B-1	Sequence 1, Appli
81	75.5	7.1	1012	1	US-08-219-262B-4	Sequence 4, Appli
82	75.5	7.1	1012	1	US-08-219-262B-12	Sequence 12, Appli
83	75.5	7.1	1012	1	US-08-219-262B-14	Sequence 14, Appli
84	75.5	7.1	1012	3	US-09-031-655-1	Sequence 1, Appli
85	75.5	7.1	1012	3	US-09-031-655-2	Sequence 2, Appli
86	75.5	7.1	1012	3	US-09-031-655-4	Sequence 4, Appli
87	75.5	7.1	1012	3	US-09-031-655-12	Sequence 12, Appli
88	75.5	7.1	1012	3	US-09-031-655-14	Sequence 14, Appli
89	75.5	7.1	1012	3	US-09-252-991A-24505	Sequence 24505, A
90	75	7.0	193	4	US-09-540-236-3313	Sequence 3313, Ap
91	75	7.0	458	4	US-09-252-991A-17386	Sequence 17386, A
92	75	7.0	482	4	US-09-252-991A-23213	Sequence 23213, A
93	75	7.0	508	4	US-09-107-532A-6946	Sequence 6946, Ap
94	75	7.0	729	3	US-08-433-522A-4	Sequence 4, Appli
95	75	7.0	797	3	US-08-433-522A-6	Sequence 6, Appli
96	75	7.0	797	3	US-08-433-522A-6	Sequence 6, Appli
97	75	7.0	797	3	US-09-135-166-2	Sequence 2, Appli
98	75	7.0	797	3	US-09-135-166-6	Sequence 6, Appli
99	75	7.0	797	3	US-09-135-166-6	Sequence 6, Appli
100	75	7.0	797	3	US-09-135-166-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1

US-08-553-336A-7

; Sequence 7, Application US/08553336A

; Patent No. 6413738

; GENERAL INFORMATION:

; APPLICANT: Wayne R. Thomas and Kaw-Yan Chua

; TITLE OF INVENTION: Allergenic Proteins and Peptides From

; TITLE OF INVENTION: House Dust Mite and Uses Therefor

; NUMBER OF SEQUENCES: 15

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: LAHIVE & COCKFIELD, LLP

; STREET: 28 State Street

; CITY: Boston

; STATE: Massachusetts

; COUNTRY: USA

; ZIP: 02109

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/553,336A

; FILING DATE: 10-JUN-1996

; CLASSIFICATION: 424

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/081,540

; FILING DATE: 22-JUNE-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: Jane E. Remillard

; REGISTRATION NUMBER: 38,872

; REFERENCE/DOCKET NUMBER: IMI-032CP2

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (617)227-7400

; TELEFAX: (617)742-4214

; INFORMATION FOR SEQ ID NO: 7:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 213 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: protein

US-08-553-336A-7

Query Match 100.0%; Score 1068; DB 4; Length 213;
Best Local Similarity 100.0%; Pred. No. 1.5e-113;
Matches 213; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MMKELLIAAVAFVAVSADPHYDKITBEINKAIDDAIAAEQSETIDPMKVPDHADKFER 60

Db 1 MMKELLIAAVAFVAVSADPHYDKITBEINKAIDDAIAAEQSETIDPMKVPDHADKFER 60

Qy 61 HVGIVDFKGLAMRNIEARGLKQMKROGDANVKGEIGVKAHLIGVHDDIVSMEYDLAY 120

Db 61 HVGIVDFKGLAMRNIEARGLKQMKROGDANVKGEIGVKAHLIGVHDDIVSMEYDLAY 120

Qy 121 KGLDHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEVRQFANVNVNHIGGLSILDPFG 180

Db 121 KGLDHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEVRQFANVNVNHIGGLSILDPFG 180

Qy 181 VLSDVLTAFQDVTVRKEMTKVLAPAFKRELEKN 213

Db 181 VLSDVLTAFQDVTVRKEMTKVLAPAFKRELEKN 213

RESULT 2

US-08-553-336A-2

; Sequence 2, Application US/08553336A

; Patent No. 6413738

```
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02109
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/462,778
/ FILING DATE:
/ CLASSIFICATION: 424
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: USN 08/031,141
/ FILING DATE: 12 March 1993
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Amy E. Mandragouras
/ REGISTRATION NUMBER: 36,207
/ REFERENCE/DOCKET NUMBER: IPC-053CP (IMI-032CP)
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-227-7400
/ TELEFAX: 617-227-5941
/ INFORMATION FOR SEQ ID NO: 2:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 215 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-08-462-778-2

Query Match 89.8%; Score 959; DB 3; Length 215;
Best Local Similarity 85.4%; Pred. No. 4,1e-101;
Matches 182; Conservative 19; Mismatches 12; Indels 0; Gaps 0;

QY 1 MMKFLIAAVAFVAVSADPHYDKITTEINKAIDDAIAIEQSETIDPKVPDHDKPER 60
Db 1 MMKLLIAAAAFVAVSADPHYDKITTEINKAVDEAAIAEKSETPDPKVPDHDKPER 60
QY 61 HVGIVDFKGLAMRNTIARGLKQKQGDANVKGEGIVKKAHLIGVHDDIVSMYDLAY 120
Db 61 HIGIIDLKGLDNRNIVQRLGKQKRVGDANVKGEGIVKKAHLIGVHDDIVSMYDLAY 120
QY 121 KLGLDHPHTTVISDIDQFVVALSLEISDEGNITMTSFVRQFANVNVHIGGLSILDPFG 180
Db 121 KLGLDHPHTTVISDIDQFVVELSLEVSSEGNMTLTSFVRQFANVNVHIGGLSILDPFA 180
QY 181 VLSDLVLTAFQDITVRKEMTKVLAPAKRELEKN 213
Db 181 VLSDLVLTAFQDITVRKEMTKVLAPAKRELEKN 213

RESULT 4
US-08-973-462-8
; Sequence 8, Application US/08973462B
; Patent No. 6191270
; GENERAL INFORMATION:
; APPLICANT: DRUILHE, PIERRE
; APPLICANT: DAUBERSIES, PIERRE
; TITLE OF INVENTION: MALARIAL PRE-ERYTHROCYTIC STAGE POLYPEPTIDE MOLECULES
; FILE REFERENCE: 0650-0125-0 PCT
; CURRENT APPLICATION NUMBER: US/08/973,462B
; CURRENT FILING DATE: 1998-02-06
; EARLIER APPLICATION NUMBER: PCT/FR96/00894
; EARLIER FILING DATE: 1996-06-12
; EARLIER APPLICATION NUMBER: FR 95/07007
; EARLIER FILING DATE: 1995-06-13
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 1786
; TYPE: PRT
; ORGANISM: Artificial Sequence

/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Polypeptide
US-08-973-462-8

Query Match 8.4%; Score 90; DB 3; Length 1786;
Best Local Similarity 23.3%; Pred. No. 1;
Matches 47; Conservative 43; Mismatches 78; Indels 34; Gaps 9;

QY 22 YDKITEINKAIDDAIAIEQSETIDPKVPDHDKPERHVGIVDFKGLAMRNIARGL 81
Db 979 FNTVLDKVEETVEISGESLENNE---MDKAPFSEIFDNVKGIOENLLTGMRFSIETSI 1034
QY 82 KOMKROGDANVKGEGIVKKAHLIGVHDDIVSMYDLAYKGLDHPHTTVISDIDQFVVA 141
Db 1035 IQSEKVDLN---ENVVSSIL-----DNENKKEGLLNKLENISSTEGQETVTEHV-- 1083
QY 142 LSLEISDEGNITMTSFV---ROFANVNVHIGGLS-----ILDPIFGLVSLDLTA--IFQ 191
Db 1084 -----EQNV-YVDVDVPAMKDOFLGILNEAGLKEMFNFLEDFVKSESQVITVEIKD 1135
QY 192 DTVRKEMTKVLAPAKRELEKN 213
Db 1136 EPVQKEVEKETVSIIE-EMEEN 1156

RESULT 5
US-08-336-618-12
; Sequence 12, Application US/08336618
; Patent No. 5763590
; GENERAL INFORMATION:
; APPLICANT: Peattie, Debra A.
; APPLICANT: Harding, Matthew W.
; APPLICANT: Livingston, David J.
; TITLE OF INVENTION: ISOLATION OF AN Mx 52,000 FK506 BINDING
; TITLE OF INVENTION: PROTEIN AND MOLECULAR CLONING OF A CORRESPONDING HUMAN
; TITLE OF INVENTION: CDNA
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESS: Hamilton, Brook, Smith and Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/336,618
; FILING DATE: 09-NOV-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/963,325
; FILING DATE: 16-OCT-1992
; APPLICATION NUMBER: US 07/777,752
; FILING DATE: 11-OCT-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/
; FILING DATE: 09-OCT-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: VFI91-06A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 459 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
```

MOLECULE TYPE: protein
US-08-336-618-12
Query Match 8.3%; Score 88.5; DB 1; Length 459;
Best Local Similarity 24.6%; Pred. No. 0.19;
Matches 30; Conservative 25; Mismatches 50; Indels 17; Gaps 3;
QY 18 DPHYDKITEINKAIDDAIAAIEQSETI-----DPMKVPDHAD-KFERHV 62
DB 75 DKFSFDLKGGEVIAKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPKIPPNATLVFE--V 132
QY 63 GIVDPFKGELAMNTEARGLKQMKROGDANVKGEGIVKAHLLIGVHDDIVSMEYDLAYKL 122
DB 133 ELFEFKGEDLTBEEDGGIIRIQTREGYAKPNEGAIVEVALEGGYKDKLPDQRELRFEI 192
QY 123 GD 124
DB 193 GE 194
RESULT 6
US-08-336-618-26
; Sequence 26, Application US/08336618
; Patent No. 5763590
; GENERAL INFORMATION:
; APPLICANT: Peattie, Debra A.
; APPLICANT: Harding, Matthew W.
; APPLICANT: Livingston, David J.
; TITLE OF INVENTION: ISOLATION OF AN MR 52,000 FK506 BINDING
; TITLE OF INVENTION: PROTEIN AND MOLECULAR CLONING OF A CORRESPONDING HUMAN
; TITLE OF INVENTION: CDNA
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith and Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: Massachusetts
; COUNTRY: U.S.A.
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/336.618
; FILING DATE: 09-NOV-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/963,325
; FILING DATE: 16-OCT-1992
; APPLICATION NUMBER: US 07/777,752
; FILING DATE: 11-OCT-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/
; FILING DATE: 09-OCT-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: VP191-06A
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 459 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-336-618-26
Query Match 8.3%; Score 88.5; DB 1; Length 459;
Best Local Similarity 24.6%; Pred. No. 0.19;

Matches 30; Conservative 25; Mismatches 50; Indels 17; Gaps 3;
QY 18 DPHYDKITEINKAIDDAIAAIEQSETI-----DPMKVPDHAD-KFERHV 62
DB 75 DKFSFDLKGGEVIAKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPKIPPNATLVFE--V 132
QY 63 GIVDPFKGELAMNTEARGLKQMKROGDANVKGEGIVKAHLLIGVHDDIVSMEYDLAYKL 122
DB 133 ELFEFKGEDLTBEEDGGIIRIQTREGYAKPNEGAIVEVALEGGYKDKLPDQRELRFEI 192
QY 123 GD 124
DB 193 GE 194
RESULT 7
US-09-393-858-2
; Sequence 2, Application US/09393858
; Patent No. 6627747
; GENERAL INFORMATION:
; APPLICANT: Fritz, Christian
; APPLICANT: Youngman, Philip
; APPLICANT: Guzman, Luz-Maria
; TITLE OF INVENTION: ESSENTIAL BACTERIAL GENES AND THEIR USE
; FILE REFERENCE: 06286-088001
; CURRENT APPLICATION NUMBER: US/09/393,858
; PRIOR FILING DATE: 1999-09-09
; PRIOR APPLICATION NUMBER: 60/099,578
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 393
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
US-09-393-858-2
Query Match 8.2%; Score 88; DB 4; Length 393;
Best Local Similarity 21.8%; Pred. No. 0.17;
Matches 46; Conservative 34; Mismatches 89; Indels 42; Gaps 8;
QY 30 NKAIDDAIAAIEQSETIIDPMKVPDHADKFERHVIGVDFKGLAMNTEARGLKQMKROGD 89
DB 21 NFAGERISIVEDVEGTRDRIYATGEWLNRSFSMIDTGG---IDDVDAPFMEQIKHQA 77
QY 90 AN-----VKGEGIVK-----AHLIGVHDDIV-----SMEYDL---AYK 121
DB 78 IAMEEADVIVFVSGKEGITDADEVARKLYKTHKPVILAVNKVDNPMRNDIVDFVALG 137
QY 122 LGDLHPHTHV-----ISDIQDFVVALSLEISDEGNITMTSFEVROFANV-----VNHIGGL 172
DB 138 LGEPLPISVHGIGTGVDLDAIVENLFNEYEEENPDVVKFSLIGRPNVNGKSLINAILGE 197
QY 173 S--ILDPIFGVLSDLVLTAFODTVRKEMTKV 201
DB 198 DRVIASPVAGITRDAIDTHTDTCQEFMTI 228
RESULT 8
US-09-393-858-5
; Sequence 5, Application US/09393858
; Patent No. 6627747
; GENERAL INFORMATION:
; APPLICANT: Fritz, Christian
; APPLICANT: Youngman, Philip
; APPLICANT: Guzman, Luz-Maria
; TITLE OF INVENTION: ESSENTIAL BACTERIAL GENES AND THEIR USE
; FILE REFERENCE: 06286-088001
; CURRENT APPLICATION NUMBER: US/09/393,858
; PRIOR FILING DATE: 1999-09-09
; PRIOR APPLICATION NUMBER: 60/099,578
; NUMBER OF SEQ ID NOS: 43

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; SOFTWARE: PastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 436
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
US-09-393-858-5

Query Match
Best Local Similarity 8.2%; Score 88; DB 4; Length 436;
Matches 46; Conservative 34; Mismatches 89; Indels 42; Gaps 8;

QY 30 NKAIDDAIAAEQSETIDPMKVPDHADKFERHVGIVDFKGLAMRNIARGLKQKMGQD 89
Db : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
21 NRIAGERISIVEDVEGTRDRIATGEWLNRSFSDMTG---IDVDAPFMEQIKHQA 77
QY 90 AN-----VKREGIVK-----AHLIGHVDIV-----SVEYDL-----AYK 121
Db 78 IAMEADVIVFVVGSGEGITDADEYVARKLYKTHKPVILAVNKVDNPEVRNDIYDPA 137
QY 122 LGDLHPTTHV---ISDIQDFVVALSLEISDEGNITMTSFEVQFANV-----VNHIGL 172
Db 138 LGELPLISSVHGIGTGVDLDAIVENLPNEYEEENPDVIFSLIGRPNVGKSSLINAILGE 197
QY 173 S--ILDPIFGVLSGVLTAFQDVRKEMTKV 201
Db 198 DRVIASPVAGTTRDAIDTFTDQGQFTMI 228

RESULT 9
US-09-252-991A-22392
; Sequence 22392, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 22392
; LENGTH: 415
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (328)
; OTHER INFORMATION: Identity of amino acid at the above locations are unknown.
US-09-252-991A-22392

Query Match
Best Local Similarity 8.1%; Score 86; DB 4; Length 415;
Matches 28; Conservative 19; Mismatches 39; Indels 38; Gaps 4;

QY 24 KITTEINKAIDDAIAAEQSETIDPMKVPDHADKFERHVGIVDFKGLAMRNIARGLKQ 83
Db : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
83 KVLDEARLAIDARA-----EHG-----ELRGSRLRVTTTQEQYGLRQ 118
QY 84 MKRQGDANVRGEGIVKAHLIGV-----HDDIVSMEYDLAYKGLDLPHTTHVSDIQ 136
Db 119 L-----VPAQAFARLHPALQVLTSSLSHADLIGERFDVAIRLGRLEDSTHHA 171
QY 137 DFVV 140
Db 172 SFEV 175

RESULT 10
US-08-137-175A-9
```

```
; Sequence 9, Application US/08137175A
; Patent No. 577095
; GENERAL INFORMATION:
; APPLICANT: BARBOUR, Alan G.
; APPLICANT: BERGSTROM, Sven
; APPLICANT: HANSSON, Lennart
; TITLE OF INVENTION: IMPROVEMENT IN BORRELIA BURGDORFERI AND
; TITLE OF INVENTION: PROPHYLAXIS
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BROWDY AND NEIMARK
; STREET: 419 Seventh Street, N.W., Suite 300
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/137,175A
; FILING DATE: 26-OCT-1993
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/08972
; FILING DATE: 22-OCT-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: COOPER, Iver P.
; REGISTRATION NUMBER: 28,005
; REFERENCE/DOCKET NUMBER: BARBOUR-1B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-628-5197
; TELEFAX: 202-737-3528
; TELEX: 248633
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 294 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-137-175A-9

Query Match
Best Local Similarity 7.9%; Score 84.5; DB 1; Length 294;
Matches 52; Conservative 43; Mismatches 97; Indels 51; Gaps 12;

QY 1 MKKPLL-----IAAVAFVAVSADPIHYDKITEEINK-----AIDDAIAAEQS 43
Db 1 MKKYLGPALVALIACQKGAEPKENDQDVEDLKQKQKDSKDLPLVTEDTVKLFNN 60
QY 44 ETIDPMKVPDHADKFERHVGIVDFKGLAMRNIARGLKQKMGQDANVRGEGIVKAHL 103
Db 61 E-IFISKEKEDDKVELR-SIVD-----KVELKGLSE-KNTGAGELEGKA-DKSKV 108
QY 104 LIGHVDII--VSME-YD-----LAYKGLDLPHTTHVSDIQDFVVALSLEISDEGN 151
Db 109 TMLVSDLTNTTIETIYDPSNKKISQVAKGSGSTETIYKTSKLS-----AKITSN 162
QY 152 ITMTSFEVQFANVNNHI-----GGSLIDPIFGVLSVDLTAIFQDVRKEMTK 200
Db 163 TTIEYEMTDADNASKAVETLKNGLTLEGLSVGKKTTLITKEGTVTLKKEIEK 215

RESULT 11
US-08-479-017-9
; Sequence 9, Application US/08479017
; Patent No. 6143872
; GENERAL INFORMATION:
; APPLICANT: BARBOUR, Alan G.
; APPLICANT: BERGSTROM, Sven
; APPLICANT: HANSSON, Lennart
```

TITLE OF INVENTION: IMPROVEMENT IN BORRELIA BURGDORFERI AND
TITLE OF INVENTION: PROPHYLAXIS
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W., Suite 300
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,017
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/137,175
FILING DATE: 26-OCT-1993
APPLICATION NUMBER: PCT/US92/08972
FILING DATE: 22-OCT-1992
ATTORNEY/AGENT INFORMATION:
NAME: COOPER, Iver P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: BARBOUR-1B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
TELEX: 248633
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 294 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-479-017-9

Query Match 7.9%; Score 84.5; DB 3; Length 294;
Best Local Similarity 22.3%; Pred. No. 0.28;
Matches 52; Conservative 43; Mismatches 87; Indels 51; Gaps 12;
QY 1 MKKPELL-----IAAVAFVAVSADPIHYDKITEINK-----AIDDAIAAEQS 43
DB 1 MKKYLGFALVIALIACGKAEKNDQDVEDLKKQKDDSKDLPLVTEDIVKLFNN 60
QY 44 ETIDPMKVPDHPADKFERHVGIVDPKGLAMRNIEARGLKQWKQGGDANVKGBEGIVKAHL 103
DB 61 E-IPISKEKNDDKVELR-SIVD-----KVELKGLSE-KNTGAGELEGLKA-DKSKV 108
QY 104 LIGVHDDI--VSME-YD-----LAYKLGLDLPHTTHVISDIPQDFVVALSLEISDEGN 151
DB 109 TMLVSDLLNTIITIDPSNKKISSQVAKQGGSTETTYTKLS-----AKITRSNN 162
QY 152 ITMTSFVRQFANVNNHI-----GGLSILDPFGVLSDLTAIFAQDVRKEMTK 200
DB 163 TTIEVTEMTADNASKAVETLKNGITLEGSIVGGKTLTIKEGTVTLKBEIK 215

RESULT 12
US-09-134-001C-4081
; Sequence 4081, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC-007
; CURRENT APPLICATION NUMBER: US/09/134,001C
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964

; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 4081
; LENGTH: 823
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-4081
Query Match 7.9%; Score 84.5; DB 4; Length 823;
Best Local Similarity 23.0%; Pred. No. 1.4;
Matches 50; Conservative 35; Mismatches 87; Indels 45; Gaps 11;
QY 18 DPIH-----YDKITEINKAIDDAIAAEQSETIDPMKVPDHPADKFERHVGIVFKGELA 72
DB 510 DTLHKRVIGQNDVANSISKAVRAAGLK-----DP-----KRPIGSFIFLGPTG 554
QY 73 MNIE-ARGL-KQMKRQGDANVKGE-EGIVKAHL---LIGV-----HDDIVSMEYDLAY 120
DB 555 VGKTELARALAESMFEGDDAMIRVDMSEFMKHAVSRVLVGAPPVGVGHDDGGQUTEKVR 614
QY 121 KLGDLHPHTTHVISD-----IQDFVVALSLEISDEGNITMTSFVRQFANV---NHIGGL 172
DB 615 K-----PYSVILFDEIEKAHPDVFNILLQVLDGHLTDTKGRTVDFRNTVIIMTSNVAQA 669
QY 173 SILDPFGVLSDLTAIFAQDVRKEMTKVLAPAKRE 209
DB 670 ELQQRFAFGGASEGSDYETVTKMTMKELKNSRPE 706

RESULT 13
US-09-498-520A-34
; Sequence 34, Application US/09498520A
; Patent No. 6613553
; GENERAL INFORMATION:
; APPLICANT: Rock, Charles O
; APPLICANT: Heath, Richard J
; TITLE OF INVENTION: No. 6613553el Enoyl Reductases and Methods of Use Thereof
; FILE REFERENCE: SJ-0022
; CURRENT APPLICATION NUMBER: US/09/498,520A
; CURRENT FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 62
; SOFTWARE: Patent In version 3.1
; SEQ ID NO 34
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Thermotoga maritima
US-09-498-520A-34

Query Match 7.9%; Score 84; DB 4; Length 314;
Best Local Similarity 23.5%; Pred. No. 0.35;
Matches 48; Conservative 32; Mismatches 76; Indels 48; Gaps 10;
QY 23 DKITEINKAIDDAIAA---IQSETIDPMKVPDHPADKFERHV-----GIVDPKGLA 72
DB 122 DSLARMVERAGADAVIAEGMESGGHIGEVTTFLVKNKVSRSVNFVIAAGGIADGRGMAA 181
QY 73 MNIEARGLKQMKR-----QGDANVKGBEGIVKAHLIGVHDDIVSMEYDLAYKLGDLHP 127
DB 182 AFALCAEAVQMGTRFVASVESDVHPVYKEKIVKA---SIRDVTVT-----GAKLG--HP 230
QY 128 T-----THVISDIQDFVVALSLEISD-----EGNITMTSFVRQFANVNHIGGL 172
DB 231 ARVLRTPFARKIOEMEFENPMQAEMLVGSLLRAVVEGDLERGSFVWGQSAGLIDEI--- 287
QY 173 SILDPFGVLSDLTAIFAQDVRK 196
DB 288 ---KPVKQIIEIDLKE-FKEIVTEK 307

RESULT 14
US-09-673-395A-197

[illegible]

QY 135 IQDFVWLSLEISDEGNITMTSEFVROFANVNVHIGLSILDPFGVLSVLTAFQDTV 194
Db 164 TOMLFAHGLTLDK--APSVFFVKLKNLNVHYGYAVL-----SISKQLANLFQSVV 217
QY 195 RKENTKV 201
Db 218 NPEISKI 224

RESULT 17

US-09-565-501A-110
; Sequence 110, Application US/09565501A

; Patent No. 6607731

; GENERAL INFORMATION:

; APPLICANT: Reed, Steven G.

; APPLICANT: Campos-Neto, Antonio

; APPLICANT: Webb, John R.

; APPLICANT: Dillion, Davin C.

; APPLICANT: Skeiky, Yasir A.W.

; APPLICANT: Bhatia, Ajay

; APPLICANT: Coler, Rhea

; APPLICANT: Probst, Peter

; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE

; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS

; FILE REFERENCE: 210121.420C6

; CURRENT APPLICATION NUMBER: US/09/565,501A

; CURRENT FILING DATE: 2000-05-05

; NUMBER OF SEQ ID NOS: 112

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 110

; LENGTH: 845

; TYPE: PRT

; ORGANISM: Leishmania major

; FEATURE:

; NAME/KEY: VARIANT

; LOCATION: (1)...(845)

; OTHER INFORMATION: Xaa = Any Amino Acid

US-09-565-501A-110

Query Match

Best Local Similarity 7.8%; Score 83; DB 4; Length 845;

Mismatches 42; Conservative 34; Indels 34; Gaps 10;

QY 29 INKAIDDAIAAEQSEITIDPMKVPDHADKFERHVGIVDFKGLAMRNIEARGLKQMKRQG 88
Db 2 VNFVTDQVRELMYDQIRNMSVIAHVD-----HGKSTLSDSLVAAGIIRKVEEAG 52
QY 89 DANV---KGEEGIVKAHLIGVHDDIVSMYDLAYK-LGDLHPTTHVISIDQDFVWLSL 144
Db 53 DKRIMDTRADE-IARG---ITIKSTAISMHYHVPKEMIGDLD-----DKRDFLINL-- 100
QY 145 EISDEGNITMTSEFVROFANVNVHIGLSILDPFGVLSVLTAFQDTVRKEMTKVLAP 204
Db 101 -IDSPGHVDFSS-EVTAALRVTD--GALVVVDCVEGVCVQTETVL-----RQALTERIRP 151

RESULT 18

US-09-639-206A-110

; Sequence 110, Application US/09639206A

; Patent No. 6613337

; GENERAL INFORMATION:

; APPLICANT: Reed, Steven G.

; APPLICANT: Campos-Neto, Antonio

; APPLICANT: Webb, John R.

; APPLICANT: Dillion, Davin C.

; APPLICANT: Skeiky, Yasir A.W.

; APPLICANT: Bhatia, Ajay

; APPLICANT: Coler, Rhea

; APPLICANT: Probst, Peter

; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE

; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS

; FILE REFERENCE: 210121.420C7

; CURRENT APPLICATION NUMBER: US/09/639,206A

; CURRENT FILING DATE: 2000-08-14
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 110
; LENGTH: 845
; TYPE: PRT
; ORGANISM: Leishmania major
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(845)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-639-206A-110

Query Match

Best Local Similarity 7.8%; Score 83; DB 4; Length 845;

Mismatches 42; Conservative 34; Indels 34; Gaps 10;

QY 29 INKAIDDAIAAEQSEITIDPMKVPDHADKFERHVGIVDFKGLAMRNIEARGLKQMKRQG 88
Db 2 VNFVTDQVRELMYDQIRNMSVIAHVD-----HGKSTLSDSLVAAGIIRKVEEAG 52
QY 89 DANV---KGEEGIVKAHLIGVHDDIVSMYDLAYK-LGDLHPTTHVISIDQDFVWLSL 144
Db 53 DKRIMDTRADE-IARG---ITIKSTAISMHYHVPKEMIGDLD-----DKRDFLINL-- 100
QY 145 EISDEGNITMTSEFVROFANVNVHIGLSILDPFGVLSVLTAFQDTVRKEMTKVLAP 204
Db 101 -IDSPGHVDFSS-EVTAALRVTD--GALVVVDCVEGVCVQTETVL-----RQALTERIRP 151

RESULT 19

US-09-874-923-110

; Sequence 110, Application US/09874923

; Patent No. 6638517

; GENERAL INFORMATION:

; APPLICANT: Reed, Steven G.

; APPLICANT: Campos-Neto, Antonio

; APPLICANT: Webb, John R.

; APPLICANT: Dillion, Davin C.

; APPLICANT: Skeiky, Yasir A.W.

; APPLICANT: Bhatia, Ajay

; APPLICANT: Coler, Rhea

; APPLICANT: Probst, Peter

; APPLICANT: Brannon, Mark

; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE

; TITLE OF INVENTION: THERAPY AND DIAGNOSIS OF LEISHMANIASIS

; FILE REFERENCE: 210121.420C8

; CURRENT APPLICATION NUMBER: US/09/874,923

; CURRENT FILING DATE: 2001-06-04

; NUMBER OF SEQ ID NOS: 122

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 110

; LENGTH: 845

; TYPE: PRT

; ORGANISM: Leishmania major

; FEATURE:

; NAME/KEY: VARIANT

; LOCATION: (1)...(845)

; OTHER INFORMATION: Xaa = Any Amino Acid

US-09-874-923-110

Query Match

Best Local Similarity 7.8%; Score 83; DB 4; Length 845;

Mismatches 42; Conservative 34; Indels 34; Gaps 10;

QY 29 INKAIDDAIAAEQSEITIDPMKVPDHADKFERHVGIVDFKGLAMRNIEARGLKQMKRQG 88
Db 2 VNFVTDQVRELMYDQIRNMSVIAHVD-----HGKSTLSDSLVAAGIIRKVEEAG 52
QY 89 DANV---KGEEGIVKAHLIGVHDDIVSMYDLAYK-LGDLHPTTHVISIDQDFVWLSL 144
Db 53 DKRIMDTRADE-IARG---ITIKSTAISMHYHVPKEMIGDLD-----DKRDFLINL-- 100

QY 145 EISDEGNTMTSFEVRQFANVNVHIGLSILDPFGVLSVLTALFQDVTVRKEMTKVLAP 204
Db 101 -IDSPGHVDFSS-EVTAALRVTD--GALVVVDCVEGVCVQETVL-----RQALTERIRP 151

RESULT 20
US-09-134-001C-4057
; Sequence 4057, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC-007
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 4057
; LENGTH: 362
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-4057

Query Match 7.7%; Score 82; DB 4; Length 362;
Best Local Similarity 24.4%; Pred. No. 0.74;
Matches 31; Conservative 27; Mismatches 39; Indels 30; Gaps 7;

QY 84 MKEQGDANVKGEGIVKAHLIGHVDIVSMEDYLAJLGLDLPHT-THVISDIQDFVVAL 142
Db 216 VKRE-----KGQGL-----DILNQLYLDYPTFVHPTOSH--SDIDTLIKL 257

QY 143 SLEISDEGNTMTSFEVRQFANVNVHIGLSILDPFGVLSVLTALFQDVTVRKEMTKVL 202
Db 258 AQCY--HAHVITTDNL----NKVCHVQGTALN-----VNDLSEAIPKENVHVGQGLSL 306

QY 203 APAFKE 209
Db 307 LTKIGKE 313

RESULT 21
US-09-198-452A-894
; Sequence 894, Application US/09198452A
; Patent No. 8559294
; GENERAL INFORMATION:
; APPLICANT: Griffiths, R.
; TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection
; TITLE OF INVENTION: and treatment of infection
; FILE REFERENCE: 9710-003-999
; CURRENT APPLICATION NUMBER: US/09/198,452A
; CURRENT FILING DATE: 1998-11-24
; NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 894
; LENGTH: 397
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-894

Query Match 7.7%; Score 82; DB 4; Length 397;
Best Local Similarity 20.4%; Pred. No. 0.85;
Matches 46; Conservative 44; Mismatches 69; Indels 66; Gaps 11;

QY 23 DKITEE-----INKAIDDAIAIEQSETIDPKVPDHDADKE-----RH 61
Db 155 NKFTKQIRILTKA---SISAIEESQNVRTVNDQVEEFYVNVAGROFNFTASGLDN 211

QY 62 VGIV-DFKGEIAMNIEARGIKQMKRQD-----ANKGEGIVKAHLIGHVDIVS 113

Db 212 AGVIRDRGVIPVDETMTNVTNVIYAIGDITGKLLAHVASHOGVIAAKNISGHB---V 268
QY 114 MEYDLAYKLGDLPHTTHVISDIQDFVVALSLEISDEGNI--TMTSFEVRQ----- 161
Db 269 MDYSAIPSVIFTHP-----EIAMVGLSLOAEQONLPAKLPKFPKKAIGKAVALGAS 320

QY 162 --FANVNVH-----IGGLSILDPFGVLSVLTALFQDVTVRKEMT 199
Db 321 DGFAAIVSHEITQILGAYVIGPHASSLIGEMTL-----AIRNLT 361

RESULT 22
US-08-461-722-2
; Sequence 2, Application US/08461722
; Patent No. 6335183
; GENERAL INFORMATION:
; APPLICANT: Young, Richard A. and Young, Douglas
; TITLE OF INVENTION: Stress Proteins and Uses Therefor
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: 2 Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/461,722
; FILING DATE: 05-JUNE-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/336,251
; FILING DATE: 03-NOV-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/06362
; FILING DATE: 06-JUN-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/073,381
; FILING DATE: 04-JUN-1993
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/804,632
; FILING DATE: 09-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/366,581
; FILING DATE: 15-JUN-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/207,298
; FILING DATE: 15-JUN-1988
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US89/02619
; FILING DATE: 15-JUN-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: WHI88-08AFA4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 547 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-461-722-2

```

Query Match          7.6%; Score 81.5; DB 4; Length 547;
Best Local Similarity 20.4%; Pred. No. 1.6;
Matches 48; Conservative 37; Mismatches 85; Indels 65; Gaps 10;
MOLECULE TYPE: protein
US-08-336-251-2

QY 13 VAVSADPHYDKITEEINKAIDDAI-AAIEQSETIDPMKVPDHDADKFERHVGIVDFKGL 71
DB 107 VAAGNPM-----DLKRGIDKAVTAAVEE---LKALSVPCSDSKAIAQVGIISANSD 156
QY 72 AVRNIETARGLKQMKQGDANVKGEIGVKAHLIGVHDD---IVSMYDYLAYKLGDL--H 126
DB 157 TVGKLIAEAMDKV-----GKEGVITVEDGTGLQDELVDWEGMQDFRGYLSPYFINK 207
QY 127 PTHVISDIQDFVALSLEISD-----EGNITWTSFEVRQ 161
DB 208 PETGAVELESPFILLADKKISNIREMLPVLEAVAKAGKPLLIIAEDVEGEALATA----- 262
QY 162 FANVNNHIGGL-----SILDPFGVLSVDLTAIFQDVTVRKEMTKVLAPAFKRELEK 212
DB 263 ---VVNTIRGIVKVAAPGFG---DRRKAMLODIATLTGGTVISEIGMELEK 311

RESULT 24
US-09-468-041-2
; Sequence 2; Application US/09468041
; Patent No. 6482614
; GENERAL INFORMATION:
; APPLICANT: Young, Richard S.
; TITLE OF INVENTION: Stress Proteins and Uses Therefor
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: 2 Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/468,041
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/336,251
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/073,381
; FILING DATE: 04-JUN-1993
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/804,632
; FILING DATE: 09-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/366,581
; FILING DATE: 15-JUN-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/207,298
; FILING DATE: 15-JUN-1988
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US89/02619
; FILING DATE: 15-JUN-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REFERENCE/DOCKET NUMBER: WH188-08AF33
; TELEPHONE: (617) 861-6240
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

```

REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: WHI88-08AFA3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 861-6240
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 547 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-468-041-2

Query Match
Best Local Similarity 20.4%; Score 81.5; DB 4; Length 547;
Matches 48; Conservative 37; Mismatches 85; Indels 65; Gaps 10;

QY 13 VAVSADPIHYDKITEEINKAIDAI-AAIEQSETIDPMKVPDHDADKFERHVGIVDFKGL 71
DB 107 VAAGNPM-----DLKRGIDKAVTAVEE---LKALSVPCSDSKAIAQVGTISANSDE 156
QY 72 AMRNIARGLKQMKRQGDANVKGEIGVKAHLIGVHDD---IVSMEYDLAYKLGDL--H 126
DB 157 TVGKLIAREMDKV-----GKEGVITVEDGTGLQDELVDVVEGMQDFRGYLSPYFINK 207
QY 127 PTHVISIDIQFVVALSLEISD-----EGNITMTSFEVRQ 161
DB 208 PETGAVELESFFILLADKKISNIREMLPVLEAVAKAGKPLIIIAEDVVEGALATA----- 262
QY 162 FANVNHIGGL-----SILDRIFGVLSDVLTAFQDVTVRKEMTKVLAPAFKRELEK 212
DB 263 ---VVNTIRGIVKVAAPKAFGFG---DRRKAMLDIATLTGGTVISSEIGMELEK 311

RESULT 25
PCT-US94-06362-2
Sequence 2, Application PC/TUS9406362
GENERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION: Stress Proteins and Uses Therefor
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: 2 Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: USA
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/06362
FILING DATE: 06-JUN-1994
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/073,381
FILING DATE: 04-JUN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: WHI88-08AFA2 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 861-6240
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 547 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US94-06362-2

Query Match
Best Local Similarity 20.4%; Score 81.5; DB 5; Length 547;
Matches 48; Conservative 37; Mismatches 85; Indels 65; Gaps 10;

QY 13 VAVSADPIHYDKITEEINKAIDAI-AAIEQSETIDPMKVPDHDADKFERHVGIVDFKGL 71
DB 107 VAAGNPM-----DLKRGIDKAVTAVEE---LKALSVPCSDSKAIAQVGTISANSDE 156
QY 72 AMRNIARGLKQMKRQGDANVKGEIGVKAHLIGVHDD---IVSMEYDLAYKLGDL--H 126
DB 157 TVGKLIAREMDKV-----GKEGVITVEDGTGLQDELVDVVEGMQDFRGYLSPYFINK 207
QY 127 PTHVISIDIQFVVALSLEISD-----EGNITMTSFEVRQ 161
DB 208 PETGAVELESFFILLADKKISNIREMLPVLEAVAKAGKPLIIIAEDVVEGALATA----- 262
QY 162 FANVNHIGGL-----SILDRIFGVLSDVLTAFQDVTVRKEMTKVLAPAFKRELEK 212
DB 263 ---VVNTIRGIVKVAAPKAFGFG---DRRKAMLDIATLTGGTVISSEIGMELEK 311

RESULT 26
US-08-467-822-32
Sequence 32, Application US/08467822
Patent No. 5843460
GENERAL INFORMATION:
APPLICANT: Labigne, Agnes
APPLICANT: Sauerbaum, Sebastien
APPLICANT: Ferrero, Richard L.
APPLICANT: Thiberge, Jean-Michel
TITLE OF INVENTION: IMMUNOGENIC COMPOSITIONS AGAINST
TITLE OF INVENTION: HELICOBACTER INFECTION, POLYPEPTIDES FOR USE IN THE
TITLE OF INVENTION: COMPOSITIONS, AND NUCLEIC ACID SEQUENCES ENCODING SAID
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,822
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/447,177
FILING DATE: 19-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/432,697
FILING DATE: 02-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 03495.0137-02000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4000
TELEFAX: (202) 408-4400
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 548 amino acids
TYPE: amino acid
STRANDEDNESS: single


```

; TITLE OF INVENTION:  HELICOBACTER INFECTION, POLYPEPTIDES FOR USE IN THE
; TITLE OF INVENTION:  COMPOSITIONS, AND NUCLEIC ACID SEQUENCES ENCODING SAID
; TITLE OF INVENTION:  COMPOSITIONS, AND NUCLEIC ACID SEQUENCES ENCODING SAID
; TITLE OF INVENTION:  POLYPEPTIDES
; NUMBER OF SEQUENCES:  44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE:  Dunner
; STREET:  1300 I Street, N.W.
; CITY:  Washington
; STATE:  D.C.
; COUNTRY:  USA
; ZIP:  20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE:  Floppy disk
; COMPUTER:  IBM PC compatible
; OPERATING SYSTEM:  PC-DOS/MS-DOS
; SOFTWARE:  PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER:  US/08/466,248
; FILING DATE:  06-JUN-1995
; CLASSIFICATION:  435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:  US 08/447,177
; FILING DATE:  19-MAY-1995
; CLASSIFICATION:  435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:  US 08/432,697
; FILING DATE:  02-MAY-1995
; CLASSIFICATION:  435
; ATTORNEY/AGENT INFORMATION:
; NAME:  Meyers, Kenneth J.
; REGISTRATION NUMBER:  25,146
; REFERENCE/DOCKET NUMBER:  03495.0137-02000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE:  (202) 408-4000
; TELEFAX:  (202) 408-4400
; INFORMATION FOR SEQ ID NO:  32:
; SEQUENCE CHARACTERISTICS:
; LENGTH:  548 amino acids
; TYPE:  amino acid
; STRANDEDNESS:  single
; TOPOLOGY:  linear
; MOLECULE TYPE:  protein
;
US-08-466-248-32

```

```

Query Match          7.6%; Score 81.5; DB 3; Length 548;
Best Local Similarity 20.4%; Pred. No. 1.6;
Matches 48; Conservative 37; Mismatches 85; Indels 65; Gaps 10;

QY      13 VAYSADTIHYDKITEEINKAIDDAI-AAIEOSETIDPMKVPDHDACKPERHVGIVDFXGEL 71
       107 VAAGMPEV-----DLKRGIDKAVTAABVE---LKALSVFCDSKAIAQVGTISANSD 156
DB

QY      72 AMRNIEARGHLKOMKROGDANVKYBEGIGKAHLLIGVHDD--IVSMBYDIAYKLGDLL--H 126
       157 TVGKLIIAAEMDKV-----KGEGVITVEDGTGLQDELVDVBMGFDRGYLSPYFPINK 207
QY      127 PTHTVISIDIQDFVALSLEISD-----EGNITMTSPFEVRQ 161
       208 PETCAVELESPPILLADKKISNIREMPVLVEAVAKAGKPILLIAEDVEGEALATA---- 262
DB

QY      162 FANVVNHGGI-----SILDPIFGVLSVLTAFIPQOTVRKENTKVLAFAFKRELEK 212
DB      263 ---VVNTIRGIKVAAVKAPGFG---DERRAMLODIATLTGGTVISBEIGNGLESEK 311

```

RESULT 30
US-09-570-778A-12
; Sequence 12, Application US/09570778A
; Patent No. 6468773
; GENERAL INFORMATION:
; APPLICANT: Trimbur, Donald E.
; APPLICANT: Whited, Gregory M.

```

; APPLICANT: Selifonova, Olga V.
; TITLE OF INVENTION: Mutant 1,3-Propanediol Dehydrogenase
; FILE REFERENCE: GC580-2
; CURRENT APPLICATION NUMBER: US/09/570,778A
; CURRENT FILING DATE: 2000-05-14
; PRIOR APPLICATION NUMBER: US 60/134,868
; PRIOR FILING DATE: 1999-05-19
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 385
; TYPE: PRT
; ORGANISM: Clostridium pasteurianum
US-09-570-778A-12

```

Query March	7.6%;	Score 81;	DB 4;	Length 385;
Best Local Similarity	23.8%;	Pred. No. 1.1;		
Matches	48;	Conservative 39;	Mismatches 71;	Indels 44; Gaps 10
QY	2	MKFLLLAAAFVAVSA-DPHYDKITTEINKA--IDDAIAAIEQSETIDPMKVPDHPADKF	58	
DB	161	IKFVIVSRNLPLVSINDPILMIKKPAGLTATGMDALTHAIESVSKDANPVTD----	215	
QY	59	ERHVGIVDFKGLAMRNIE--ARGLKQMKRGDANVKGEGIVKAHLIGVHDDIVSNXY	116	
DB	216	-----ALAIQAIKLTANNLRQAVALGE-NLEARENMAVASTLAGMAFNANILGY	263	
QY	117	--DLAYKLGDLHPHTTVHSIQDFWALSLSEISDEGNITMTSFVRQFANPVNHHIG----	170	
DB	264	VHMAHQGLGYDMAHGVA-----AMLEPHVERYNLISNP---KKFPADIAEFMGENIE	314	
QY	171	GLSI-----LDPIFGVLSDV	185	
DB	315	GLSVWEAAEAKAIDAMFRLSKDV	336	

```

RESULT 31
US-09-991-138-12
; Sequence 12, Application US/09991138
; Patent NO. 6558933
; GENERAL INFORMATION:
; APPLICANT: Trimbur, Donald E.
; APPLICANT: Whited, Gregory M.
; APPLICANT: Selifonova, Olga V.
; TITLE OF INVENTION: Mutant 1,3-Propanediol Dehydrogenase
; FILE REFERENCE: GC580-2D1
; CURRENT APPLICATION NUMBER: US/09/991,138
; CURRENT FILING DATE: 2001-11-16
; PRIOR APPLICATION NUMBER: US 09/570,778
; PRIOR FILING DATE: 2000-05-14
; PRIOR APPLICATION NUMBER: US 60/134,868
; PRIOR FILING DATE: 1999-05-19
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 385
; TYPE: FRT
; ORGANISM: Clostridium pasteurianum
US-09-991-138-12

```

```

Query Match      7.6%; Score 81; DB 4; Length 385;
Best Local Similarity 23.8%; Pred. No. 1.1;
Matches 48; Conservative 39; Mismatches 71; Indels 44; Gaps 10;

Qy  2 MKFLLIAAFVAVSA--DPHYDKITEIINKA--IDDAIAAIEOSEITIDPMKVPDHADKP 58
      :|:::| | | | | : | | | | | | | | | | | | | | | | | | | | | |
Db 161 IKFVIVSWRNPLVSIINDPILMIKKPAGLTAATGMDALTAIESVYSGKDANPVTD---- 215
      :|:::| | | | | : | | | | | | | | | | | | | | | | | | | | | |

Qy 59 ERHVGIVDFKGEIARNRIE--ARGLKQMKQGDANVKGEISIVKAHLILGVHDDIVSMXEY 116
      :|:::| | | | | : | | | | | | | | | | | | | | | | | | | | | |

Db 216 -----ALAIQAIKLIANNLRQAVALGE-NLEARENMAVYASLLAGNAFNNALIGY 263
      :|:::| | | | | : | | | | | | | | | | | | | | | | | | | | | |

Qy 117 --DLAYKLGDLHPHTTHVISIDOPFWALSLEISDEGNITWTSFEVROFANVVNHIG---- 170
      :|:::| | | | | : | | | | | | | | | | | | | | | | | | | | | |

```



```

Db      161 TVGKLIARMDKV-----GKEGVITVEDGTGLEDELVDVVEGMQFDRGYLSPYFINK 211
Qy      121 -----KLGDLPHTTHVISDIQDFVVVALSLEISDEGNITMTSFV 159
         : :: : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      212 PDTGAVERPFIADKKISNIREMLPVLEAVAKACKPIVIAEDVEGEALATL----- 266
Qy      160 RQANVNVNHIGGL-----SIIDPIFGVLSDVLTAIFQDVTVRKENTKVLAFAFKRELEK 212
         ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      267 -----VNTVRGIVKVAAPKAFPG---DRRKAMLDIATLTGGTVISEIGNMELEK 315


RESULT 36
US-09-252-991A-19476
; Sequence 19476; Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 19476
; LENGTH: 538
; TYPE: PR1
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-19476

Query Match              7.5%; Score 80.5; DB 4; Length 538;
Best Local Similarity   21.6%; Pred. No. 2;
Matches    44; Conservative 34; Mismatches 53; Indels 73; Gaps 11;

Qy      17 ADPIH---YD---KITEEINKAIDDAIAIEQSETIDPMKVDPHADKFERHHVGIVDFKGE 70
Db      196 ADRIHLAPDGAVEVHDVRRALD-----PAHG-----AGGVGIAGE 233
Qy      71 LAVRN-----IARGLKMQKGQDANKVBEGIVKAHLIGVDDHIVSMYDLAYKLGDLJH 126
         : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      234 LLLQDQVEFLQRRLGHGVQR-GDA----QDDIQAHLV-----EMAEHLGGL- 275
Qy      127 PTHVTSIDIQDFVVALSLEISDEGNITMTSFVRQPANVNVNHIGGLSILDPIFGVLSDVL 186
         : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      276 -----VCIEVGDHGDILRVF-----VTDHVGHGTRLPLQAQVA-AG 312
Qy      187 TAIFQDVTVRKENTKVLAFAFKREL 210
         : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      313 AAAEEDAVDQVWGLVLAEGIGEHL 336


RESULT 36
US-09-252-991A-26608
; Sequence 26608; Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 26608
; LENGTH: 1504
; TYPE: PR1

```

; CURRENT APPLICATION NUMBER: US/09/561,818A
 ; CURRENT FILING DATE: 2000-04-28
 ; NUMBER OF SEQ ID NOS: 28
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 10
 ; LENGTH: 1816
 ; TYPE: PRT
 ; ORGANISM: Mus musculus
 US-09-561-818A-10

Query Match	7.5%	Score 80;	DB 4;	Length 1816;
Best Local Similarity	21.3%;	Prad. No. 15;		
Matches	44;	Conservative	90;	Mismatches 34;
				Gaps 9;
QY	25	ITEINKAIDATAAIBQSETIDPMKVPDPAKDFEHRHGVDFKGLAARINIEARGLKQM	84	
DB	481	LOESINQALDHVRDAEDMNPAL-TFKQRDEKHQEEVKEQMEVVGASLSMSADSITIPQL	539	
QY	85	K-RGQDANVKGEEGIVKAHLIGVDDIVSMGYDLAYKLGDLHPHTH-VISDIQFVVAL	142	
DB	540	TLEELDEIIRKNASGI-----YAEIDGAKNELQGLKNLSLNSHLDVQEAIDTHAYNL	590	
QY	143	-----SLEISDEGNIWTMTSFVRQ-FANVVAHIG-----GLSILDPFGVLSD	184	
DB	591	QQEADLSRLNHSSDMGKIVQKALDASNVYENIANYVSEANETAELANITRIYDAVSG	650	
QY	185	VLTAFQDTRVKEMTKVLAPAFKRELE	211	
DB	651	IDTGTIIYH--KDESNDLLNQA--RELQ	673	

RESULT 39
 US-08-336-618-24
 ; Sequence 24, Application US/08336618
 ; Patent No. 5763590
 ; GENERAL INFORMATION:
 ; APPLICANT: Peattie, Debra A.
 ; APPLICANT: Harding, Matthew W.
 ; APPLICANT: Livingston, David J.
 ; TITLE OF INVENTION: ISOLATION OF AN Mr 52,000 FK506 BINDING
 ; TITLE OF INVENTION: PROTEIN AND MOLECULAR CLONING OF A CORRESPONDING HUMAN
 ; TITLE OF INVENTION: CDNA
 ; NUMBER OF SEQUENCES: 32
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSER: Hamilton, Brook, Smith and Reynolds, P.C.
 ; STREET: Two Militia Drive
 ; CITY: Lexington
 ; STATE: Massachusetts
 ; COUNTRY: U.S.A.
 ; ZIP: 02173
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent in Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/336,618
 ; FILING DATE: 09-NOV-1994
 ; CLASSIFICATION: 435
 ; PRIORITY APPLICATION DATA:
 ; APPLICATION NUMBER: 07/963,325
 ; FILING DATE: 16-OCT-1992
 ; APPLICATION NUMBER: US 07/777,752
 ; FILING DATE: 11-OCT-1991
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/
 ; FILING DATE: 09-OCT-1992
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Granahan, Patricia
 ; REGISTRATION NUMBER: 32,227
 ; REFERENCE/DOCKET NUMBER: VP191-06A
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 617-861-6240

TELEFAX: 617-861-9540 24:
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 458 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-336-618-24

Query Match	7.4%;	Score 79.5;	DB 1;	Length 458;
Best Local Similarity	22.1%;	Pred. No. 2;		
Matches	27;	Conservative	29;	Mismatches 49;
			Indels	17;
			Gaps	3;
QY	18	DPHYDKITEINKAIDDAIAAEQSEIT-----DPMKVDPHAD--KFERHV	62	
Db	75	DKFSFDLGKGEVIAKWDIAVATMKVGELCRITCKPEYAGSAGSPKIPPNATLVFE--V	132	
QY	63	GIVDFKGLANRNIEARGLKQMKRQGDANVKGEIGIVKAHLLIGVHDDIVSMEYDLAYKL	122	
Db	133	ELFEFKGEDLTDDGEGITRITRGEGYARENDGAIVEVALEGYKXKDLDFQELAFEV	192	
QY	123	GD	124	
Db	193	GE	194	

```

RESULT 40
US-09-543-681A-6606
; Sequence 6606, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543.681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 6606
; LENGTH: 557
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-6606

```

	Query Match	7.4%;	Score 79.5;	DB 4;	Length 557;
	Best Local Similarity	17.7%;	Pred. NO. 2.8;	80;	Indels
	Matches 42;	Conservative			Gaps 9;
QY	13	VAVSADPIHDKITEEINKAIDDA-IAAIEQSTIDPMKVPDHAKFERHVCIVDFKCEL	71		
Db	116	VAAAGNPM-----DLKRGIDKAAVGAEBE-----LKKLSVPCSDTKAIAQVGTISANSDE	165		
QY	72	AMRNIEARGLKQMKROGDANVKGEEGIVKAHLIGVHDD---IVSMEYDLAY-----	120		
Db	166	TVGTLIAQAMEKV-----GKEGVIITVEEGTGLEDELDVVEGQDFRGVLSYFINK	216		
QY	121	-----KLGDLHPHTHVISDIOQDFWALSLEISDEGNITMTSPFV	159		
Db	217	PETGTAELENPFILLVBKKVSNIRELLFVLEGVAKANKPLIIAEDVGEALATI-----	271		
QY	160	ROFANVNVHIGGL-----SILDPIFGVLSVDVLTAIFDVTVRKMTKVLAPAFKRELEK	212		
Db	272	-----VTVNWEGIVKVAAYVAPFG-----DFRKAMIQDIATILNGTVISBEGIMELEK	320		

RESULT 41
US-08-094-889-1
; Sequence 1, Application US/08094889
; Patent No. 5470966
; GENERAL INFORMATION:
; APPLICANT: Shinji HIRANO et al.

Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252.991A
PRIOR FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 32411
LENGTH: 593
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-32411

Query Match 7.4%; Score 79; DB 4; Length 593;
Best Local Similarity 23.6%; Pred. No. 3.5;
Matches 37; Conservative 25; Mismatches 59; Indels 36; Gaps 7;

QY 38 AAIEQSETIDPMKVPD-----HADKPERHV-GIVDFKGLAMRNIEARGLKQMKRQ 87
Db 64 AAIEQAGEQFVVDGFFLEVPVAGGQVEHAPGVVAADQAAADGPVVRG-----EGQ 119

QY 88 GDANYKGBEGIV-----KAHLIGVHDDIVSMYDLYAYKLDLHPHVVHISDIQDFWA 141
Db 120 GDFRQEGREGLLVQTRRQHRVAALDAIL-----LVAQAGGQGP-----VAQ 164

QY 142 LSLEISDSGNITMTSFVRQFANVNHIG-GLSILDP 177
Db 165 AVVQLAETELRVVEGRQPAQVQCLVAGAGVDP 201

RESULT 44
US-09-252-991A-23008
Sequence 23008, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252.991A
CURRENT FILING DATE: 1999-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 23008
LENGTH: 768
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-23008

Query Match 7.4%; Score 79; DB 4; Length 768;
Best Local Similarity 23.6%; Pred. No. 5.1;
Matches 35; Conservative 27; Mismatches 60; Indels 26; Gaps 7;

QY 61 HVG-IVDFKGLAMRNIEARGLKQMKRQ--DANYKGBEGIVKAHLIGVHDDIVSMYD 117
Db 585 HLGVRVLEIVQVLLGNAENLDLVLAEGVAVDQQLQAAPGRLO-RLEIGMMENLVHRAE 643

QY 118 LAYKLDLHPHVVHISDIQDFVVALSLEISDEGNITMTSFVRQFANVNHIGLSILDP 177
Db 644 LGVDLGD-HPVDRL--LHRLAVLRLE-----QFLDE-----GGDAALGD 681

QY 178 IFGVLSDLVLTAFQDTRKEMTKVLA 205
Db 682 VVGLVVRAQAGLGDADAVENVVFAVLVPA 709

RESULT 45
US-09-134-000C-3522
Sequence 3522, Application US/09134000C
Patent No. 6617156
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-032
CURRENT APPLICATION NUMBER: US/09/134.000C
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/055,778
PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
SOFTWARE: Patent in version 3.1
SEQ ID NO 3522
LENGTH: 166
TYPE: PRT
ORGANISM: Enterococcus faecalis
US-09-134-000C-3522

Query Match 7.4%; Score 78.5; DB 4; Length 166;
Best Local Similarity 28.4%; Pred. No. 0.56;
Matches 54; Conservative 30; Mismatches 61; Indels 45; Gaps 13;

QY 38 AAIEQSETIDPMKVPDHADKFE--RHVGIVDFKGLAMRNIEARGLKQMKRQGDANYKE 95
Db 4 AAIAKKEYL-----VQAAAEKESASVVIVDYG--LTVEEVTNLRKQLR--DAGV--E 52

QY 96 EGIVKAHL-----IGVH--DDIVSMYDLYAYKLDLHPHVVHISDI-QDFVVALSLEI 146
Db 53 MKVIRKNSILSRAAKKVGDLDEVTGTAVAFSNDVDVAFKIDFAKD---AKALEI 109

QY 147 SD---EGNITMTSFVRQFANVNHIGLSILDPFGVLSVLTAFQDTRKEMTKVLA 203
Db 110 KGVIEGRVSS-----VEQITAKLAPNREGVLS-MLLSVLQAPVRN-----VA 152

QY 204 PAFKRELEKN 213
Db 153 YAVKAVAENK 162

RESULT 46
US-09-134-000C-6150
Sequence 6150, Application US/09134000C
Patent No. 6617156
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-032
CURRENT APPLICATION NUMBER: US/09/134.000C
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/055,778
PRIOR FILING DATE: 1997-08-15
NUMBER OF SEQ ID NOS: 6812
SOFTWARE: Patent in version 3.1
SEQ ID NO 6150
LENGTH: 437
TYPE: PRT
ORGANISM: Enterococcus faecalis
US-09-134-000C-6150

Query Match 7.4%; Score 78.5; DB 4; Length 437;
Best Local Similarity 21.7%; Pred. No. 2.5;
Matches 52; Conservative 38; Mismatches 85; Indels 65; Gaps 11;

QY 5 LLTAAVAFVAVSADPHYDKITEEINKALDDAIAAEQSETIDPMKVPDHADKFERHVG- 63
Db 80 LVIGMEATSLYSPHPAMFFKDELELNQL--NLWVSEQ-----FNKIKKYRDIFFENKND 132

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403 VGTKELARALAESFMFGDDAMIRVDMSEPMKEHAVSELVCAPGYVGHDDGGGLTEKVR 462
121 KLGDLHPHTHVID-----IQDFVALSLEISDSGNTMTSFVFRQANVV-----NHIGL 172
463 K-----PWSVLFEIEKALPDPFNILQVLDGHLTDTKGRTVDFDNTIIIMTSVQAQ 517
173 SILDPIFGLVSDVLTAIFQDTPVRKMTKVLAPAKRE 209
518 ELQQRFAFGCGSSDGQDYETIRKTMKLKLNFRPE 554

```

RESULT 48
US-09-621-855-4
; Sequence 4, Application US/09621855
; Patent No. 6346608
; GENERAL INFORMATION:
; APPLICANT: Jaworski, Deborah J.
; Wang, Min
; Shilling, Lisa K.
; Burnham, Martin
; Fosberry, Andrew
; Hodgson, John E.
; Lawlor, Elizabeth
; Rosenberg, Martin
; Ward, Judith
; TITLE OF INVENTION: Mecb
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dechert, Price & Rhoads
; STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre
; CITY: Philadelphia
; STATE: PA
; COUNTRY: USA

ZIP: 19103-2793
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: Windows 95
 SOFTWARE: FastSeq for Windows Version 2.0b
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/621,855
 FILING DATE: 24-Jul-2000
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/040,843
 FILING DATE: <Unknown>
 ATTORNEY/AGENT INFORMATION:
 NAME: Falk, Stephen T
 REGISTRATION NUMBER: 36,795
 REFERENCE/DOCKET NUMBER: GM10082
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 215-994-2488
 TELEFAX: 215-994-2222
 TELEX: <Unknown>
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 672 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 SEQUENCE DESCRIPTION: SEQ ID NO: 4:

```

Query Match          7.4%; Score 78.5; DB 4; Length 672;
Best Local Similarity 22.6%; Pred. No. 4.8;
Matches 49; Conservative 37; Mismatches 86; Indels 45; Gaps 11;

18 DPHYDKITEE-----INKAIDATAAIEQSETIDPMKVPDHAUKFERHHYGVDFKGLA 72
   | | | | | : | : | : | : | : | : | : | : | : | : | : | : | : |
358 DTUHERVIGCKDANVISIKAVRARAGUK-----DP-----XRPGISFIFLGTG 402

73 MNRIE-ARGL-QMKRQGDANVKGK-EGIVKAHL---LIGV-----HDDITVSMEYDLAY 120

```

Db 549 VGKTELARALAESMGDDDDAMIRVDNSEFMKHAUSRLVGPYVGHDDGGQOLTEKVR 608
 Qy 121 KLGLDHPHTHVID-----IQDFVVALSLEISDEGNITMTSFEVRQFANVV-----NHIGGL 172
 Db 609 K-----PYSVILFDEIEKAHPDVFNILLQVLDGHLTDTKGRTVDFRNTIILMTSNVGAQ 663
 Qy 173 SILDPFGVLSDLVLTAFQDVTVRKEMTKVLAPAFKRE 209
 Db 664 ELQDQRFAGFGSGSDGQDYETIRKTKMLKELKNSFRPE 700

RESULT 50

US-09-621-855-2
 ; Sequence 2, Application US/09621855
 ; Patent No. 6346608
 ; GENERAL INFORMATION:
 ; APPLICANT: Jaworski, Deborah J.

Wang, Min
 Shilling, Lisa K.
 Burnham, Martin
 Rosberry, Andrew
 Hodgson, John E.
 Lawlor, Elizabeth
 Rosenberg, Martin
 Ward, Judith
 TITLE OF INVENTION: MecB
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Dechert, Price & Rhoads
 STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre
 CITY: Philadelphia
 STATE: PA
 COUNTRY: USA
 ZIP: 19103-2793

COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: Windows 95
 SOFTWARE: FastSEQ for Windows Version 2.0b
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/621,855
 FILING DATE: 24-Jul-2000
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/040,843
 FILING DATE: <Unknown>
 ATTORNEY/AGENT INFORMATION:
 NAME: Falk, Stephen T
 REGISTRATION NUMBER: 36,795
 REFERENCE/DOCKET NUMBER: GM10082
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 215-994-2488
 TELEFAX: 215-994-2222
 TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 866 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 SEQUENCE DESCRIPTION: SEQ ID NO: 2:
 US-09-621-855-2

Query Match 7.4%; Score 78.5; DB 4; Length 866;
 Best Local Similarity 22.6%; Pred. No. 7;
 Matches 49; Conservative 37; Mismatches 86; Indels 45; Gaps 11;
 Qy 18 DPHYDKITEE-----INKAIDATAAEQSTIDPMKVPDHDADKFERHVGIVDFKGLA 72
 Db 504 DTLHERVIGQDAVNSISKAVRARAGLK-----DP-----KRPISGFIPLGPTG 548
 Qy 73 MRNIE-ARGL-KOMKQGDANVKE-EGIVKAHL---LIGV-----HDDIVSMEYDLAY 120

Db 403 VGKTELARALAESMGDDDDAMIRVDNSEFMKHAUSRLVGPYVGHDDGGQOLTEKVR 462
 Qy 121 KLGLDHPHTHVID-----IQDFVVALSLEISDEGNITMTSFEVRQFANVV-----NHIGGL 172
 Db 463 K-----PYSVILFDEIEKAHPDVFNILLQVLDGHLTDTKGRTVDFRNTIILMTSNVGAQ 517
 Qy 173 SILDPFGVLSDLVLTAFQDVTVRKEMTKVLAPAFKRE 209
 Db 518 ELQDQRFAGFGSGSDGQDYETIRKTKMLKELKNSFRPE 554

RESULT 49

US-09-040-843-2
 ; Sequence 2, Application US/09040843
 ; Patent No. 6124119
 ; GENERAL INFORMATION:

APPLICANT: Jaworski, Deborah J.
 Wang, Min
 Shilling, Lisa K.
 Burnham, Martin
 Rosberry, Andrew
 Hodgson, John E.
 Lawlor, Elizabeth
 Rosenberg, Martin
 Ward, Judith
 TITLE OF INVENTION: MecB
 NUMBER OF SEQUENCES: 6
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Dechert, Price & Rhoads
 STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre
 CITY: Philadelphia
 STATE: PA
 COUNTRY: USA
 ZIP: 19103-2793

COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: Windows 95
 SOFTWARE: FastSEQ for Windows Version 2.0b
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/040,843
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 60/057,535
 FILING DATE: 29-AUG-1997
 ATTORNEY/AGENT INFORMATION:
 NAME: Falk, Stephen T
 REGISTRATION NUMBER: 36,795
 REFERENCE/DOCKET NUMBER: GM10082
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 215-994-2488
 TELEFAX: 215-994-2222
 TELEX:

INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 866 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 US-09-040-843-2

Query Match 7.4%; Score 78.5; DB 3; Length 866;
 Best Local Similarity 22.6%; Pred. No. 7;
 Matches 49; Conservative 37; Mismatches 86; Indels 45; Gaps 11;
 Qy 18 DPHYDKITEE-----INKAIDATAAEQSTIDPMKVPDHDADKFERHVGIVDFKGLA 72
 Db 504 DTLHERVIGQDAVNSISKAVRARAGLK-----DP-----KRPISGFIPLGPTG 548
 Qy 73 MRNIE-ARGL-KOMKQGDANVKE-EGIVKAHL---LIGV-----HDDIVSMEYDLAY 120

Db 549 VKTELALAESEMGDDAMIRVDMSEFMEKEHVASLVCAPGYVGHDDGGQOLTEKVR 608
QY 121 KLGLDHPHTHVISD-----IQFVVVLSLEISDEGNITMTSFEVRQFANVV---NHIGL 172
Db 609 K-----PYSVILFEIEKAHPDENILLQVLDGCHLTDTKGRTVDFRNTIIMTSNVGAQ 663
QY 173 SILQPIFGVLSVLTAFQDVRKEMTKVLAPAFKR 209
Db 664 ELQQRFAFGSGSSGQDQYETIRKTMKELNSFRPE 700

RESULT 51
US-09-489-039A-7682
; Sequence 7682, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: 2709.2004001
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US/09/489,039A
; PRIOR FILING DATE: 2000-01-27
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 7682
; LENGTH: 511
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-7682

Query Match 7.3%; Score 78; DB 4; Length 511;
Best Local Similarity 21.2%; Pred. No. 3.6; Mismatches 75; Indels 54; Gaps 11;
Matches 45; Conservative 38;

QY 18 DPHYD-KIT---EEINKAIDDAIAAEQSETIDPMKVPDHPADKFERHVGIVDPKGLA 72
Db 14 DPHGTIRLTLEIASINHPFORLNIKONSFLYKVPSPAVSRPHSLGVLHLSSEI- 72
QY 73 MNIEARGLKQKRGQDANVKG-----EGIVKAHLIGVHD---DIVSMEYDL---A 119
Db 73 LNNRLNIRYQKYDGHVGHFDIQPKNIQELRLAALMHDHGHGVPVSHQFESFMPGK 132
QY 120 YKGLDHPHTT-HVISDI-----QDFVVVLSL-----BISDEGNITMTSFE 158
Db 133 HEFSDVLTAVYHSIIDVLKPEQKVEHEQLSLFLSLMIYHDLRQKGVDDINI----- 186
QY 159 VRQFANVNH-----GGLSILDPFGVLSVLT 186
Db 187 ----ENVLKIEKRYGQQQIIEEINGKATDIL 214

RESULT 52
US-09-252-991A-19045
; Sequence 19045, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: 107196.136
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 19045
; LENGTH: 516
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-19045

Query Match 7.3%; Score 78; DB 4; Length 516;
Best Local Similarity 25.4%; Pred. No. 3.6; Mismatches 27; Indels 64; Gaps 13;
Matches 49; Conservative 27;

QY 13 VAVSADPIHYDKITE--EINKAIDDAIAAEQSETIDPMKVPDHPADKFERHVGIV-DPKG 69
Db 118 VAGAADAVHILGADVGRVDVAVD-----VELQRRID-----ADDAQATD-HLGVVGDFLR 167
QY 70 E-----LAMNTEARGLKQKRGQDANVKG-----EGIVKAHLIGVHDIVSM 114
Db 168 AQHQLVILVALQVTEHVGAVP-REQGDRRAARGEAQLAGVQDVEGRVLOH--FGVHGOVLER 224
QY 115 EYDLA--YKGLDHPHTTHVISDIQDFVVVLSLEISDEGNITMTSFEVRQFANVNHIGL 172
Db 225 RLDQAHERVGD-----AADTG-----LQRAEVAHAPGV 254

RESULT 53
US-08-219-262B-7
; Sequence 7, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: 52/70
US-08-219-262B-7

Query Match 7.3%; Score 78; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 10; Mismatches 37; Indels 28; Gaps 10;
Matches 39; Conservative 37;

;; CURRENT APPLICATION NUMBER: US/09/252,991A
;; CURRENT FILING DATE: 1999-02-18
;; PRIOR APPLICATION NUMBER: US 60/074,788
;; PRIOR FILING DATE: 1998-02-18
;; PRIOR APPLICATION NUMBER: US 60/094,190
;; PRIOR FILING DATE: 1998-07-27
;; NUMBER OF SEQ ID NOS: 33142
;; SEQ ID NO 31003
;; LENGTH: 409
;; TYPE: PKT
;; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-31003

Query Match 7.3%; Score 77.5; DB 4; Length 409;
Best Local Similarity 24.2%; Pred. No. 2.9;
Matches 40; Conservative 28; Mismatches 62; Indels 35; Gaps 8;
QY 23 DKITEINKAIDDAIAIEQSETIDPMKVPDHPADKFER-----HV-CIVD-----F 67
DB 134 EKAANKINQALDECLSA--HNMTPRGSLPALPPAFDRPFRPSTHAPGLLDMLLRSS 191
QY 68 KGLAMENIERA--RGLKQMKRQGDANVKGEGIVKAHLIGVHDDIVSMYDLYKIGD 124
DB 192 KVEKEAELEAQYQODIFEWTAARDAHEKARSIDDKA-IRLAAGKGYSAQNERALDYVLSG 250
QY 125 L-----HPTTHVISDIQDFVVALSLEISDEGNITMTSFEVR 160
DB 251 IAWPKETILLEFESHVSGI-----ALDIDLPDGDVNPETAEAR 290

RESULT 59
US-09-074-579-3
; Sequence 3, Application US/09074579
; Patent No. 6001596
; GENERAL INFORMATION:
; APPLICANT: Hillman, Jennifer L.
; APPLICANT: Guegler, Karl J.
; APPLICANT: Patterson, Chandra
; TITLE OF INVENTION: GROWTH-ASSOCIATED TRYPSIN-TYPE
; TITLE OF INVENTION: INHIBITOR HEAVY CHAIN PRECURSOR
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Word Perfect 6.1/MS-DOS 6.2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/074,579
; FILING DATE: HEREWITH
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Cerrone, Michael C
; REGISTRATION NUMBER: 39,132
; REFERENCE/DOCKET NUMBER: PF-0505 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-855-0555
; TELEFAX: 650-845-4166
; TELEX:
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 946 amino acids
; TYPE: amino acid
; STRANDEDNESS: single

;; TOPOLOGY: linear
;; IMMEDIATE SOURCE:
;; LIBRARY: GENE BANK
;; CLONE: gi33985
US-09-074-579-3
Query Match 7.3%; Score 77.5; DB 3; Length 946;
Best Local Similarity 19.8%; Pred. No. 10;
Matches 57; Conservative 46; Mismatches 84; Indels 101; Gaps 14;
QY 19 PIHYDKITEINKAID--DATAAIEQSETIDPMKVPDHPADKFERHVGIVDPKGL-AMRN 75
DB 301 PDNLDPIPKNLFVIDVSGSMVGKMQTVEAMKTIILDDRAEDHFSVIDFNQNIWRN 360
QY 76 -----IEARGLKQMKRQGDANVKGEGIVKAHLIGVHDDIVSMB---YDLAYK 121
DB 361 DLFLQKHLRLQIAKRYIEIKIOPSGGTNI--NEALLRAIFILNEANNLGLDNPNSVLIIL 418
QY 122 LGDLHPTT-----HVISDIQDFVALSL-----EISDE-----G 150
DB 419 VSDGDPYTGELKLSKIQKNVKENIQDNISLFGMGDFVDYDFLKRLSNENHGHIAQRIY 478
QY 151 NITMTSFEVROFANVW-----NHIGGLSIL-----DPI- 178
DB 479 N-QDTSSQLKFKYQVSTPLLRNVQFNYPHTSVTDVTQNNFNHYFGGSEIVVAGKFDPAK 537
QY 179 FGVLSDVLTAI-----FQTVRKEMTKVLAPAFKREL 210
DB 538 LDQIESVITATSANTQLVLETLAQMDLDLQDFLSKD--KHADPDFTRKL 583

RESULT 60
US-09-388-774-3
; Sequence 3, Application US/09388774
; Patent No. 6228991
; GENERAL INFORMATION:
; APPLICANT: Hillman, Jennifer L.
; APPLICANT: Guegler, Karl J.
; APPLICANT: Patterson, Chandra
; TITLE OF INVENTION: GROWTH-ASSOCIATED TRYPSIN-TYPE
; TITLE OF INVENTION: INHIBITOR HEAVY CHAIN PRECURSOR
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Word Perfect 6.1/MS-DOS 6.2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/388,774
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/074,579
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Cerrone, Michael C
; REGISTRATION NUMBER: 39,132
; REFERENCE/DOCKET NUMBER: PF-0505 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-855-0555
; TELEFAX: 650-845-4166
; TELEX:
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 946 amino acids
; TYPE: amino acid


```

; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: GENE BANK
; CLONE: gi33985
US-09-388-774-3

Query Match
Best Local Similarity 7.3%; Score 77.5; DB 3; Length 946;
Matches 57; Conservative 46; Mismatches 84; Indels 101; Gaps 14;

QY 19 PIHYDKITEINKAID--DAIAAIEQSEITDPKVPDHDADKPERHVGIVDEKXGEL-AMEN 75
Db 301 PDNLDPKPKILFVIDVSGSMGWVKMKQTVKAKTILDLRAEDHPSVDFPNQNTWRN 360
QY 76 -----IEARGLKQKRGDANVKGEIGIVKHAHLIGVHDDIVSME---YDLAYK 121
Db 361 DLPQLQKHLRIQAKRYIEKIQPSGGTNI--NEALLRAIFILNEANGLDPSVSLIIL 418
QY 122 LGDLHPTT-----HWISDIQDFVVALSI-----EISDE-----G 150
Db 419 VSDGDTVGBELKSKIQKQVKNIQNISLFLGMGFDVVDYDFLKKLSNENHGIARIVG 478
QY 151 NITMTSFEVRQFANV-----NHIGLSIL-----DPI- 178
Db 479 N-QDTSSQLKFKYNQVSTPLLRNVQFNYPHTSVTDVTQNNHNYFGGSEIVVAGKFDPAK 537
QY 179 FGVLSVLTAL-----FOQTVRKENTKVLAPAFKRE 210
Db 538 LQOIESVITATSANTQLVLETLAQMDLDQDFLSKD--KHADPDFTRKL 583

RESULT 61
US-09-328-352-5704
; Sequence 5704, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE REFERENCE: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 5704
; LENGTH: 1233
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-5704

Query Match
Best Local Similarity 7.3%; Score 77.5; DB 4; Length 1233;
Matches 50; Conservative 16; Mismatches 93; Indels 27; Gaps 7;

QY 15 VSADPTHYDKITEINK--AIDDAIAIEQSEITD--PMKYPDHDADKPERHVGIVDPKGELA 72
Db 93 VMSDTHMEDLVPEINREARLAKAACEKYSTDPKRFVAGVLGPTSRCTCSISPPVNNPA 152
QY 73 MRNIEARGLKQKRGDANVKGEIGIVKHAHLIGVHDDIVSME--YDLAYKLGDLHPTTH 130
Db 153 FRNISFDELK-----ENVIEATHALIEGGADIIILITVFTDLNCKAAIFAVKE 200
QY 131 VISDI-QDFVVALSISDEGNITMTSFEVRQFANVNH-----IG-----GLSILDPIF 179
Db 201 VFQIGRELPIMTSGTITDASGRTLTGQTAEAFWNSVRHGDLISLGFNCALGADAMVRHV 260
QY 180 GVLSDV 185
Db 261 KTISDV 266

RESULT 62
US-09-425-453A-8

; Sequence 8, Application US/09425453A
; Patent No. 6468793
; GENERAL INFORMATION:
; APPLICANT: Teem, John L.
; TITLE OF INVENTION: CFTR Genes and Proteins for Cystic Fibrosis Gene Therapy
; FILE REFERENCE: FSU-99XC1
; CURRENT APPLICATION NUMBER: US/09/425,453A
; CURRENT FILING DATE: 1999-10-22
; PRIOR FILING DATE: 1998-10-23
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 8
; LENGTH: 1480
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-425-453A-8

Query Match
Best Local Similarity 7.3%; Score 77.5; DB 4; Length 1480;
Matches 35; Conservative 21; Mismatches 50; Indels 17; Gaps 7;

QY 97 GIVKHAHLIGVHDDIVSMEYDLYKLGDLHPTTHVISDIQDFVVALSISDEGNITMTS 156
Db 500 GTIKENIIFGV-----SYD-EYRYSRVKACQLEEDISKFAEKONI-VLGEGGITLSG 550
QY 157 FEVRQ--FANVNHIGGLSILDPFVGLSDVLT--AIFQDQTVRKEM--TKVLAPAFKRE 209
Db 551 GQMARISLARAVYKDADLYLLDSPFGYL-DVLTEKEIFESCVCVKLMANKTRILVTSKMEH 609
QY 210 LEK 212
Db 610 LKK 612

RESULT 63
US-09-425-453A-18
; Sequence 18, Application US/09425453A
; Patent No. 6468793
; GENERAL INFORMATION:
; APPLICANT: Teem, John L.
; TITLE OF INVENTION: CFTR Genes and Proteins for Cystic Fibrosis Gene Therapy
; FILE REFERENCE: FSU-99XC1
; CURRENT APPLICATION NUMBER: US/09/425,453A
; CURRENT FILING DATE: 1999-10-22
; PRIOR FILING DATE: 1998-10-23
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 18
; LENGTH: 1480
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-425-453A-18

Query Match
Best Local Similarity 7.3%; Score 77.5; DB 4; Length 1480;
Matches 35; Conservative 21; Mismatches 50; Indels 17; Gaps 7;

QY 97 GIVKHAHLIGVHDDIVSMEYDLYKLGDLHPTTHVISDIQDFVVALSISDEGNITMTS 156
Db 500 GTIKENIIFGV-----SYD-EYRYSRVKACQLEEDISKFAEKONI-VLGEGGITLSG 550
QY 157 FEVRQ--FANVNHIGGLSILDPFVGLSDVLT--AIFQDQTVRKEM--TKVLAPAFKRE 209
Db 551 GQMARISLARAVYKDADLYLLDSPFGYL-DVLTEKEIFESCVCVKLMANKTRILVTSKMEH 609
QY 210 LEK 212
Db 610 LKK 612
```

RESULT 64
US-08-219-262B-3
; Sequence 3, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENDEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: E/DEL
US-08-219-262B-3
Query Match 7.2%; Score 77; DB 1; Length 1012;
Best Local Similarity 23.4%; Pred. No. 13;
Matches 39; Conservative 36; Mismatches 64; Indels 28; Gaps 10;
QY 40 IEQSETIDPMKVPDHADKFERHVGIVDFKELA-MRNIEARGLKQMKRQGDANVKGEI 98
DB 102 VSRSLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDHPHTTHVISDIQDFVVALSLEISDEGNI-TM 154
DB 157 ---NVLVGEGVTLSLPTSYDLGVYRLGDPPIAIGL-----DPKMWATCSDSDRPRVYTI 208
QY 155 TSFEVRQPVANVNHIGLSILDPFGVLSVLTA-----IFQDTV 194
DB 209 TAADDYQFSQYQP-GGVTI--TLFSANIDAITSLVGGELVFQTSV 252
RESULT 65
US-08-219-262B-5
; Sequence 5, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM

; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENDEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: CU-1
US-08-219-262B-5
Query Match 7.2%; Score 77; DB 1; Length 1012;
Best Local Similarity 23.4%; Pred. No. 13;
Matches 39; Conservative 36; Mismatches 64; Indels 28; Gaps 10;
QY 40 IEQSETIDPMKVPDHADKFERHVGIVDFKELA-MRNIEARGLKQMKRQGDANVKGEI 98
DB 102 VSRSLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDHPHTTHVISDIQDFVVALSLEISDEGNI-TM 154
DB 157 ---NVLVGEGVTLSLPTSYDLGVYRLGDPPIAIGL-----DPKMWATCSDSDRPRVYTI 208
QY 155 TSFEVRQPVANVNHIGLSILDPFGVLSVLTA-----IFQDTV 194
DB 209 TAADDYQFSQYQP-GGVTI--TLFSANIDAITSLVGGELVFQTSV 252
RESULT 66
US-08-708-541A-30
; Sequence 30, Application US/08708541A
; Patent No. 5871744
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, Vikram N.
; APPLICANT: MUNDT, Egbert
; TITLE OF INVENTION: A METHOD FOR GENERATING BIRNAVIRUS FROM
; TITLE OF INVENTION: SYNTHETIC RNA TRANSCRIPTS
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIKAIKO, MARMELSTEIN, MURRAY & ORAM LLP
; STREET: 655 Fifteenth Street, N. W.,
; STREET: Suite 330 - G Street Lobby

```
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005-5701
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/08/708,541A
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: KITTS, Monica C.
; REGISTRATION NUMBER: 36,105
; REFERENCE/DOCKET NUMBER: P8172-6002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202/638-5000
; TELEFAX: 202/638-4810
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-708-541A-30

Query Match 7.2%; Score 77; DB 2; Length 1012;
Best Local Similarity 23.4%; Pred. No. 13;
Matches 39; Conservative 36; Mismatches 64; Indels 28; Gaps 10;

Qy 40 IEQSETIDPMKVPDHADKFERHVGIVDFKGLA-MRNIEARGLKQMKQGQDANVKGEIGI 98
Db 102 VSRSLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156

Qy 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIQDFVVALSLEISDEGNI-TM 154
Db 157 ---NVLVGEVTVLSLPTSVDLGVRLGDPPIAIGL-----DPKMWATCDSRPRVYTI 208

Qy 155 TSFEVRQFANVNVHIGLSILDPIFGVLSDLTA-----IFQDTV 194
Db 209 TAADDYQFSQYQP-GGVTI--TLFSANIDAITSLSVGGELVFQTSV 252

RESULT 67
US-09-031-655-3
; Sequence 3, Application US/09031655
; Patent No. 6017759
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION NUMBER: US/09/031,655
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: KITTS, Monica C.
```

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/219,262
; FILING DATE: 29-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: E/DEL
; US-09-031-655-3

Query Match 7.2%; Score 77; DB 3; Length 1012;
Best Local Similarity 23.4%; Pred. No. 13;
Matches 39; Conservative 36; Mismatches 64; Indels 28; Gaps 10;

Qy 40 IEQSETIDPMKVPDHADKFERHVGIVDFKGLA-MRNIEARGLKQMKQGQDANVKGEIGI 98
Db 102 VSRSLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156

Qy 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIQDFVVALSLEISDEGNI-TM 154
Db 157 ---NVLVGEVTVLSLPTSVDLGVRLGDPPIAIGL-----DPKMWATCDSRPRVYTI 208

Qy 155 TSFEVRQFANVNVHIGLSILDPIFGVLSDLTA-----IFQDTV 194
Db 209 TAADDYQFSQYQP-GGVTI--TLFSANIDAITSLSVGGELVFQTSV 252

RESULT 68
US-09-031-655-5
; Sequence 5, Application US/09031655
; Patent No. 6017759
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION NUMBER: US 08/219,262
; FILING DATE: 29-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
```

```
;
;
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
;
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: CU-1
;
; US-09-031-655-5
;
; Query Match 7.2%; Score 77; DB 3; Length 1012;
; Best Local Similarity 23.4%; Pred. No. 13;
; Matches 39; Conservative 36; Mismatches 64; Indels 28; Gaps 10;
;
; QY 40 IQSETIDPMKVPDHADKFERHVGIVDFKGLA-WRNIEARGLKQMKRQGDANVKGEEGI 98
; DB 102 VRSLSITVRSSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
;
; QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOQFVVALSLEISDEGNI-TM 154
; DB 157 ---NVLVEGVTLSLPTSYDLGVRLGDPPIAIGL-----DPKXVATCSDSSDRPRVYTI 208
;
; QY 155 TSFEVRQANVNVHIGLSILDPFGVLSDLTA-----IFQDTV 194
; DB 209 TAADDYQFSQYQP-GGVTI--TLFSANIDAITSLSVGGELVFQTSV 252
;
; RESULT 69
; US-09-147-771-30
; Sequence 30, Application US/09147771
; Patent No. 6596280
;
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, Vikram N.
; APPLICANT: MUNDT, Egbert
; TITLE OF INVENTION: A METHOD FOR GENERATING BIRNAVIRUS
; TITLE OF INVENTION: FROM SYNTHETIC RNA TRANSCRIPTS
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARENT FOX KINTNER PLOTKIN & KAHN
; STREET: 1050 Connecticut Ave., N.W. Suite 600
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20036-5339
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/147,771
; FILING DATE:
; CLASSIFICATION:
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 09/198,913
; FILING DATE: 24-NOV-98
; APPLICATION NUMBER: PCT/US97/12955
; FILING DATE: 31-JUL-97
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/708,541
; FILING DATE: 05-SEP-96
; ATTORNEY/AGENT INFORMATION:
; NAME: KITTS, Monica C.
; REGISTRATION NUMBER: 36,105
; REFERENCE/DOCKET NUMBER: P108288-09002
;
; QY 40 IQSETIDPMKVPDHADKFERHVGIVDFKGLA-WRNIEARGLKQMKRQGDANVKGEEGI 98
; DB 102 VRSLSITVRSSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
;
; QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOQFVVALSLEISDEGNI-TM 154
; DB 157 ---NVLVEGVTLSLPTSYDLGVRLGDPPIAIGL-----DPKXVATCSDSSDRPRVYTI 208
;
; QY 155 TSFEVRQANVNVHIGLSILDPFGVLSDLTA-----IFQDTV 194
; DB 209 TAADDYQFSQYQP-GGVTI--TLFSANIDAITSLSVGGELVFQTSV 252
;
; RESULT 70
; US-09-107-532A-3785
; Sequence 3785, Application US/09107532A
; Patent No. 6583275
;
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: PC
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: ASCII
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,532A
; FILING DATE: 30-Jun-1998
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/085,598
; FILING DATE: 14 May 1998
; APPLICATION NUMBER: 60/051571
; FILING DATE: July 2, 1997
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-012
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
;
; INFORMATION FOR SEQ ID NO: 3785:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 429 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ORIGINAL SOURCE:
; ORGANISM: Enterococcus faecium
```

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;
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202/857-6000
; TELEFAX: 202/638-4810
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
; US-09-147-771-30
;
; Query Match 7.2%; Score 77; DB 4; Length 1012;
; Best Local Similarity 23.4%; Pred. No. 13;
; Matches 39; Conservative 36; Mismatches 64; Indels 28; Gaps 10;
;
; QY 40 IQSETIDPMKVPDHADKFERHVGIVDFKGLA-WRNIEARGLKQMKRQGDANVKGEEGI 98
; DB 102 VRSLSITVRSSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
;
; QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOQFVVALSLEISDEGNI-TM 154
; DB 157 ---NVLVEGVTLSLPTSYDLGVRLGDPPIAIGL-----DPKXVATCSDSSDRPRVYTI 208
;
; QY 155 TSFEVRQANVNVHIGLSILDPFGVLSDLTA-----IFQDTV 194
; DB 209 TAADDYQFSQYQP-GGVTI--TLFSANIDAITSLSVGGELVFQTSV 252
;
; RESULT 70
; US-09-107-532A-3785
; Sequence 3785, Application US/09107532A
; Patent No. 6583275
;
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: PC
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: ASCII
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,532A
; FILING DATE: 30-Jun-1998
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/085,598
; FILING DATE: 14 May 1998
; APPLICATION NUMBER: 60/051571
; FILING DATE: July 2, 1997
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-012
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
;
; INFORMATION FOR SEQ ID NO: 3785:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 429 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ORIGINAL SOURCE:
; ORGANISM: Enterococcus faecium
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; NAME/KEY: misc.feature
; LOCATION: (B) LOCATION 1...164
; SEQUENCE DESCRIPTION: SEQ ID NO: 6514:
US-09-107-532A-6514

Query Match          7.1%; Score 76; DB 4; Length 164;
Best Local Similarity 20.2%; Pred. No. 1.1;
Matches 25; Conservative 30; Mismatches 41; Indels 28; Gaps 5;

QY 64 IVDPKGELAMRNIEARGLKQMKRQGDANYKGBEG----IVKAHLILGVHDDIVSMBYDLA 119
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 8 MVEYKFNLNKLV-----LPTQGTININGQDNDDDIVKK---IEFIDSDINVFYFK 57
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 120 YKLGDLHPHTHVISDIQDFVAL--SLEISDEGNITMT-----SFVRFQFANV 165
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 58 EKLADFSNIAEMIERLKFDMISYWDVAMLADESNYTSSYRLSDSNWIBISLELKTLPNS 117
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 166 VNHI 169
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 118 VNVI 121
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 72
US-09-252-991A-22095
; Sequence 22095, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 22095
; LENGTH: 645
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-22095

Query Match          7.1%; Score 76; DB 4; Length 645;
Best Local Similarity 24.0%; Pred. No. 8.6;
Matches 37; Conservative 26; Mismatches 69; Indels 22; Gaps 8;

QY 46 IDPMKYPD-HADKFERHVGIVDFK-----GELAMRNIEARGLKQMKRQGDANY 92
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 32 VDPAPVQATADGEGVHGRGVAGFQQQLGLQGRHVLGELAGAVLDVGGVGEARLE-VADV 90
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 93 KCEEGIVKAHLILGVHDDIVSVEYDLAYKLGDLH-PTHVVISDIQDFV-VALSLEISDEG 150
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 91 RGETGVAMAVAFGEQ-----RVHEPRLRLQGTQHVALHVAGTFPDRVHRGLAVQPRQDG 146
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 151 NITMTSFVRQFANVNVHIGLSILDPIFGVLSD 184
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 147 FLDVAG-TAFAFGFVDHRRG-TLADPVLAHRGD 178
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 73
US-09-107-532A-3944
; Sequence 3944, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
; APPLICANT: Lynn A. Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; TITLE OF INVENTION: ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESS: GENOME STREET
; STREET: 100 Beaver Street

```

CITY: Waltham
 STATE: Massachusetts
 COUNTRY: USA
 ZIP: 02354
 COMPUTER READABLE FORM:
 MEDIUM TYPE: CD/ROM ISO9660
 COMPUTER: PC
 OPERATING SYSTEM: <Unknown>
 SOFTWARE: ASCII
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/107,532A
 FILING DATE: 30-Jun-1998
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: 60/085,598
 FILING DATE: 14 May 1998
 APPLICATION NUMBER: 60/051571
 FILING DATE: July 2, 1997
 ATTORNEY/AGENT INFORMATION:
 NAME: Ariniello, Pamela Deneke
 REGISTRATION NUMBER: 40,489
 REFERENCE/DOCKET NUMBER: GTC-012
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (781)893-5007
 TELEFAX: (781)893-8277
 INFORMATION FOR SEQ ID NO: 3944:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1196 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 HYPOTHETICAL: YES
 ORIGINAL SOURCE:
 ORGANISM: Enterococcus faecium
 FEATURE:
 NAME/KEY: misc.feature
 LOCATION: (B) LOCATION 1...1196
 SEQUENCE DESCRIPTION: SEQ ID NO: 3944:
 US-09-107-532A-3944
 Query Match 7.1%; Score 76; DB 4; Length 1196;
 Best Local Similarity 22.2%; Pred. No. 22;
 Matches 45; Conservative 41; Mismatches 93; Indels 24; Gaps 11;
 QY 15 VSADPIHYDKITEEINKAIDDAIAIEQSETI--DPMKVPDADKFERHVGIVDFKGBELA 72
 DB 861 LTADPSDHEVTEESLEKQINELSA---QRETLKAEKAKAQDRRQKEID--KLEAVLA 915
 QY 73 MRNIEARGHKQMKRGDQANVKGEEGIVKHAHLIGVHDDIVSMEYDLAYKLG--DLHPTTH 130
 DB 916 ERNREOKA--RLSEQSKLEQVQKD---RAEMTLDNHLTVLOSEYQLTPEKASQDYQETTD 969
 QY 131 VTSDIQDFVVALSLEISDGNITMTSFEVRQFANV--VNHIGLSILDPIFGVLSDLVTAI 189
 DB 970 -TEDSTKVSSLKEQIEKLGPNVNLASIE--QYEQVSEHTFLATQRDLDLAAKNQLFETM 1026
 QY 190 --FQDTVR---KEMTKVLAPAFK 207
 DB 1027 DEMDDEVTRFEVFEAIRQEFK 1049
 RESULT 74
 US-09-252-991A-21128
 Sequence 21128, Application US/09252991A
 Patent No. 6551795
 GENERAL INFORMATION:
 APPLICANT: Marc J. Rubenfield et al.
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
 FILE REFERENCE: 107196:136
 CURRENT APPLICATION NUMBER: US/09/252,991A
 CURRENT FILING DATE: 1999-02-18
 PRIORITY APPLICATION NUMBER: US 60/074,788
 PRIOR FILING DATE: 1998-02-18


```

; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: LUETTICKEN, HEINRICH D.
; TITLE OF INVENTION: ATTENUATED, LIVE VACCINE FOR DELAWARE
; TITLE OF INVENTION: STRAIN IDV
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER AND
; ADDRESSEE: NEUSTADT, P.C.
; STREET: 1755 JEFFERSON DAVIS HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/944,525
; FILING DATE: 19920914
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: KESLER, STEVEN B.
; REGISTRATION NUMBER: 30,073
; REFERENCE/DOCKET NUMBER: 2284-028-0 CIP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-07-944-525-2

Query Match 7.1%; Score 75.5; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IEQSETIDPMKVPDHPADKFERHVGIVDFKGLA-MRNIEARGLKQMKRQGDANVKGEI 98
Db 102 VSRSLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL----MSATANINDKIG- 156

QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOFVVVLSLEISDEGNI-TM 154
Db 157 ---NVLGEVTVLSPTSYDLGVRLGDPPIAIGL-----DPRKVVATCSDSDRPVYTI 208

QY 155 TSFEVRQFANVNHIGLSILDPIFGVLSDLVTAI 189
Db 209 TAADYQFSQY-QTGGVTI--TLFSANIDAITSLS 240

RESULT 80
US-08-219-262B-1
; Sequence 1, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORVAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: GLS
; US-08-219-262B-1

Query Match 7.1%; Score 75.5; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IEQSETIDPMKVPDHPADKFERHVGIVDFKGLA-MRNIEARGLKQMKRQGDANVKGEI 98
Db 102 VSRSLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL----MSATANINDKIG- 156

QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOFVVVLSLEISDEGNI-TM 154
Db 157 ---NVLGEVTVLSPTSYDLGVRLGDPPIAIGL-----DPRKVVATCSDSDRPVYTI 208

QY 155 TSFEVRQFANVNHIGLSILDPIFGVLSDLVTAI 189
Db 209 TAADYQFSQY-QTGGVTI--TLFSANIDAITSLS 240

RESULT 81
US-08-219-262B-2
; Sequence 2, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORVAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: GLS
; US-08-219-262B-1
```

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; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: LUETTICKEN, HEINRICH D.
; TITLE OF INVENTION: ATTENUATED, LIVE VACCINE FOR DELAWARE
; TITLE OF INVENTION: STRAIN IDV
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER AND
; ADDRESSEE: NEUSTADT, P.C.
; STREET: 1755 JEFFERSON DAVIS HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORVAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: GLS
; US-08-219-262B-1

Query Match 7.1%; Score 75.5; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IEQSETIDPMKVPDHPADKFERHVGIVDFKGLA-MRNIEARGLKQMKRQGDANVKGEI 98
Db 102 VSRSLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL----MSATANINDKIG- 156

QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOFVVVLSLEISDEGNI-TM 154
Db 157 ---NVLGEVTVLSPTSYDLGVRLGDPPIAIGL-----DPRKVVATCSDSDRPVYTI 208

QY 155 TSFEVRQFANVNHIGLSILDPIFGVLSDLVTAI 189
Db 209 TAADYQFSQY-QTGGVTI--TLFSANIDAITSLS 240

RESULT 81
US-08-219-262B-2
; Sequence 2, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORVAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: GLS
; US-08-219-262B-1
```


; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: DS326
; US-08-219-262B-2

Query Match 7.1%; Score 75.5; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IEQSETIDPMKVPDHADKFERHVGIVDPKGLA-MENIEARGLKQMKRQGDANVKGEIGI 98
Db 102 VRSRLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIQDFVVALSLEISDEGNI-TM 154
Db 157 --NVLVGEGVTLSLPTSVDLGVRLGDPPIAIGL-----DPKMATCDSSDRPRVYTI 208

RESULT 82
US-08-219-262B-4
; Sequence 4, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000

; TELEFAX: (703) 413-2220
; TELEFAX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: D78
; US-08-219-262B-4

Query Match 7.1%; Score 75.5; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IEQSETIDPMKVPDHADKFERHVGIVDPKGLA-MENIEARGLKQMKRQGDANVKGEIGI 98
Db 102 VRSRLTVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIQDFVVALSLEISDEGNI-TM 154
Db 157 --NVLVGEGVTLSLPTSVDLGVRLGDPPIAIGL-----DPKMATCDSSDRPRVYTI 208

RESULT 83
US-08-219-262B-12
; Sequence 12, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEFAX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-219-262B-12

Query Match 7.1%; Score 75.5; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IQESETIDPMKVPDADKFERHVGIVDFKGLA-MRNIEARGLKQMKRQGDANVKGEI 98
Db 102 VRSLSITVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOQFVVALSLEISDEGNI-TM 154
Db 157 ---NVLVGEGVTLSLPTSYDLGYVRLGDPPIPAIGL-----DPKMWATCSDSDRPRVYTI 208
QY 155 TSFEVRQFANVNVHIGGLSILDPFGVLSVDVLTAI 189
Db 209 TAADDYQFSSQY-QTGGVTI--TLFSANIDAITS 240

RESULT 84

US-08-219-262B-14
; Sequence 14, Application US/08219262B
; Patent No. 5788970
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENDEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/219,262B
; FILING DATE: 29-MAR-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS: linear
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-219-262B-14

Query Match 7.1%; Score 75.5; DB 1; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IQESETIDPMKVPDADKFERHVGIVDFKGLA-MRNIEARGLKQMKRQGDANVKGEI 98
Db 102 VRSLSITVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOQFVVALSLEISDEGNI-TM 154
Db 209 TAADDYQFSSQY-QTGGVTI--TLFSANIDAITS 240

Db 157 ---NVLVGEGVTLSLPTSYDLGYVRLGDPPIPAIGL-----DPKMWATCSDSDRPRVYTI 208
QY 155 TSFEVRQFANVNVHIGGLSILDPFGVLSVDVLTAI 189
Db 209 TAADDYQFSSQY-QTGGVTI--TLFSANIDAITS 240

RESULT 85

US-09-031-655-1
; Sequence 1, Application US/09031655
; Patent No. 6017759
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENDEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/09/031,655
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/219,262
; FILING DATE: 29-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: GLS
; US-09-031-655-1

Query Match 7.1%; Score 75.5; DB 3; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;

QY 40 IQESETIDPMKVPDADKFERHVGIVDFKGLA-MRNIEARGLKQMKRQGDANVKGEI 98
Db 102 VRSLSITVRSSTLPGGVYALNGTINAVTFQGSLSLTDVSYNGL-----MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIOQFVVALSLEISDEGNI-TM 154
Db 157 ---NVLVGEGVTLSLPTSYDLGYVRLGDPPIPAIGL-----DPKMWATCSDSDRPRVYTI 208
QY 155 TSFEVRQFANVNVHIGGLSILDPFGVLSVDVLTAI 189
Db 209 TAADDYQFSSQY-QTGGVTI--TLFSANIDAITS 240

RESULT 86

US-09-031-655-2
; Sequence 2, Application US/09031655
; Patent No. 6017759
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/031,655
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/219,262
; FILING DATE: 29-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: DS326
; US-09-031-655-2

Query Match 7.1%; Score 75.5; DB 3; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;
QY 40 IEQSETIDPMKVPDHADKFERHVGIVDFKGEA-MRNIEARGLKQMKRQGDANVKGEEGI 98
Db 102 VRSLSVRSSTLPGVYALNGTINAVTFQGSLSLTDVSYNGL---MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIDQDFVVALSLEISDEGNI-TM 154
Db 157 ---NVLVGEVGVTVLSLPTSVDLGVRLGDPIPAIGL-----DPKWATCDSDDRPRVYII 208
QY 155 TSFEVRQFANVNHIGLSILDPFGVLSDLVTAI 189
Db 209 TAADNYQFSQY-QTGGVTI--TLFSANIDAITSLS 240

RESULT 87

US-09-031-655-4
; Sequence 4, Application US/09031655

Patent No. 6017759
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A
; TITLE OF INVENTION: CHIMERIC INFECTIOUS BURSAL DISEASE VIRUS
; TITLE OF INVENTION: CDNA CLONES, EXPRESSION PRODUCTS AND VACCINES BASED
; TITLE OF INVENTION: THEREON
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT
; STREET: 1755 S. JEFFERSON DAVID HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/031,655
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/219,262
; FILING DATE: 29-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 2747-047-27
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (703) 413-3000
; TELEFAX: (703) 413-2220
; TELEX: 248855 OPAT UR
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1012 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Infectious bursal disease virus
; STRAIN: D78
; US-09-031-655-4

Query Match 7.1%; Score 75.5; DB 3; Length 1012;
Best Local Similarity 23.2%; Pred. No. 20;
Matches 36; Conservative 35; Mismatches 63; Indels 21; Gaps 9;
QY 40 IEQSETIDPMKVPDHADKFERHVGIVDFKGEA-MRNIEARGLKQMKRQGDANVKGEEGI 98
Db 102 VRSLSVRSSTLPGVYALNGTINAVTFQGSLSLTDVSYNGL---MSATANINDKIG- 156
QY 99 VKAHLIGVHDDIVSM--EYDLAY-KLGDLPHTTHVISDIDQDFVVALSLEISDEGNI-TM 154
Db 157 ---NVLVGEVGVTVLSLPTSVDLGVRLGDPIPAIGL-----DPKWATCDSDDRPRVYII 208
QY 155 TSFEVRQFANVNHIGLSILDPFGVLSDLVTAI 189
Db 209 TAADNYQFSQY-QTGGVTI--TLFSANIDAITSLS 240

RESULT 88

US-09-031-655-12
; Sequence 12, Application US/09031655
; Patent No. 6017759
; GENERAL INFORMATION:
; APPLICANT: VAKHARIA, VIKRAM
; APPLICANT: SNYDER, DAVID B
; APPLICANT: MENGEL-WHERSAT, STEPHANIE A

QY 11 AFVAVSAD-PIHYDKITEEINKAIDDAIAAEQSEITIDPMKVPDHPADKPERHVGIVDFK 69
Db 23 SFUSATRDKPIDDRGTRTIGSKIDSL--ITKAAVNIKADPALDK-DSHIVVVSING 79
QY 70 ELAVRNTEARGLKQKQGDANVKGEIGVKAHLIGVHDDI-VSMEYDIAYKLGDLHPT 128
Db 80 IVLIAGQTPR-----ADLKSKEAQARTVQKVNHNELQVTPSSLLARNNDAWIT 131
QY 129 ----THVISDIQFVVVALSLEISDEGNIT-----MTSFEVROQANVNVNHHIGLSILDPIF 179
Db 132 TKLTKOMLSPN--VPSRIKVVTEGIVVMGLVNOQEAQAVRVAQGVGVQKIVKULF 189

RESULT 91
US-09-540-236-3313
; Sequence 3313, Application US/09540236
; Patent No. 6673910
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CATAR
; FILE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.2005-001
; CURRENT APPLICATION NUMBER: US/09/540,236
; CURRENT FILING DATE: 2000-04-04
; NUMBER OF SEQ ID NOS: 3840
; SEQ ID NO 3313
; LENGTH: 458
; TYPE: PRT
; ORGANISM: M.catarrhalis
US-09-540-236-3313

Query Match 7.0%; Score 75; DB 4; Length 458;
Best Local Similarity 24.4%; Pred. No. 6.7;
Matches 52; Conservative 30; Mismatches 67; Indels 64; Gaps 13;

QY 3 KELLIAAVAFVAVSADPIHYDKI-TEINK-AIDDAIAAEQSEITIDPMKVP---DHADK 57
Db 228 KLSLLASIAF----GIPVQDKYCEGITKIGQDVIYAKELGYTHKLGFAIRRHGIE 283
QY 58 FERHVGIVDFKGLAMRNIEARGLKQKQGDANVKGEIGVKAHLIGVHDDIVSMEYD 117
Db 284 LRVHPTLIPSOALL-----ANVNG-----VKNVAMIDAHPLGQSLDYG 321

QY 118 LAYKGLDHPHTHVISDIQFVVVALS-----EISDEGNI-----TMTS-FEV 159
Db 322 DGAGAG--ATASAVMADMDLIYVINADTPSDVPHSGFIPELSLDIGILPADMTSGYIL 379

QY 160 RFANVNVNHHIGLSILDPIFGVLSDLVLTAFQD 192
Db 380 R-----LTVKDE-GVVLADT-TRLSD 399

RESULT 92
US-09-252-991A-23213
; Sequence 23213, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 23213
; LENGTH: 482
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-23213

Query Match 7.0%; Score 75; DB 4; Length 482;
Best Local Similarity 28.4%; Pred. No. 7.2;
Matches 54; Conservative 21; Mismatches 57; Indels 58; Gaps 13;

QY 6 LIAAV-AFVAVSADPIHYDKITEEINKAIDDAIAAEQSEITIDPMKVPDHPADKPER---H 61
Db 93 LVAAVEQVVEVDAPAAHV-----LLEASGSRRAL-PGEVVDRLVVGVDLGEALADH 145
QY 62 VOIVDFKGLAMRNTEARGLKQKQGDANVKGEIGVKAHLIGVHDDIVSMEYDLAYK 121
Db 146 LGLV---LQLAGSFAEAQGL-----FLAGAE--VAAHLL-----DRGEQ 179

QY 122 LGDLHPTTHVISDIQFVVVALS--EISDEGNI-TWTSFEVROFANVNVN-HIGLSILD- 177
Db 180 AGEI-----AAVDLGNLGDNLAF--HFGROFGNAFQLPTSQLDLADFPF 223

QY 178 -IFGVLSVIL 186
Db 224 QLFGKLADLL 233

RESULT 93
US-09-252-991A-17386
; Sequence 17386, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 17386
; LENGTH: 508
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-17386

Query Match 7.0%; Score 75; DB 4; Length 508;
Best Local Similarity 18.3%; Pred. No. 7.8;
Matches 54; Conservative 38; Mismatches 105; Indels 98; Gaps 10;

QY 5 LLIAAVAFVAVSADPIHYDKI-----TEINKAIDDAIAA-----IQOSE----- 44
Db 145 LLLVDLAGVGVADDEHFDLLVVPLEEQVEQDEEALGDVIGLGRAGDVHQAHRLLGG 204

QY 45 ---TIDPMKVPDHPADKFERHVGIVDFKGLAMRNIE----- 77
Db 205 GVGLLDQQVLEIEGIEERHP--VDARAELGDFQLEFLDIAEIVRLFALDPLQFLQRAQ 262

QY 78 ---ASGLKQKQKQ-----DANVKEEGIVKAHLIGVHDDIVSMEY 116
Db 263 LGPAAAGORDAPRMRGACAGDDVARRVAVVADAGLEGVGVAGDVALDQVGLQVLEH 322

QY 117 DL-AYKLGDLH-PTHVISDIQFVVVALSLEIS-----DEGNITMTSF 157
Db 323 EVERELLGDEDEVHFAFAVAGLAAAAA-PAAGWAGDVLAGGEBFLVAGVDVGLPPAAA 382

QY 158 EVROQANV-----VNHIGLSILDPIFGVLSDLVLTAFQDTRVKEMTKVLA 203
Db 383 VOHREVDIAPGNADLLAVLHVNGTTPADGLDGLDVFVTAPOQALAVHRAVLVA 437

RESULT 94
US-09-107-532A-6946
; Sequence 6946, Application US/09107532A
; Patent No. 6583275

GENERAL INFORMATION:
APPLICANT: LYNN A DOUCETTE-STAMM and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
NUMBER OF SEQUENCES: 7310
CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
CITY: Waltham
STATE: Massachusetts
COUNTRY: USA
ZIP: 02354
COMPUTER READABLE FORM:
MEDIUM TYPE: CD-ROM ISO9660
COMPUTER: PC
OPERATING SYSTEM: <Unknown>
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneka
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-8207
TELEFAX: (781)893-8277
INFORMATION FOR SEQ ID NO: 6946:
SEQUENCE CHARACTERISTICS:
LENGTH: 729 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ORIGINAL SOURCE:
ORGANISM: Enterococcus faecium
FEATURE:
NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...729
SEQUENCE DESCRIPTION: SEQ ID NO: 6946:
US-09-107-532A-6946

Query Match 7.0%; Score 75; DB 4; Length 729;
Best Local Similarity 20.3%; Pred. No. 14;
Matches 40; Conservative 38; Mismatches 89; Indels 30; Gaps 6;
QY 11 AFVAPSADPIHYDKITEIRKALDAAIAEQSETID-----PMKVPDHADK----- 57
DB 378 AFV-----EPVAFLEIDDPFRNAGETLALHE-EGVDLKVISGNDPFTVSNIRAGLPN 432
QY 58 FERHVGIVDFKGEAMRNIEAR-----GLKMKRQGDANVKGEGIVKAHLILIGVHDDIV 112
DB 433 YDAYVDLSQITEEMEVREAARHYTVFGRVSPQKKLLVNEKESGRVTAMTGDGVNDVLA 492
QY 113 SNEYDLAKLGLDHLHTTHVISDIQDFVVALSLSEISDEGNITMTSFVRQFANVNHGGL 172
DB 493 LREACDSIAMAGDGGATQCIAN-----LVLLSDFTTLEVLFEGRVNVNNTKVSIGI 545
QY 173 SILDPIFGVLSDLTAI 189
DB 546 PFIKTIYSFILSIICAV 562

RESULT 95
US-08-433-522A-2
; Sequence 2, Application US/08433522A
; Patent No. 6013514
; GENERAL INFORMATION:

APPLICANT: CHONG, Pele
APPLICANT: THOMAS, Wayne
APPLICANT: YANG, Yan Ping
APPLICANT: LOOSMORE, Sheena
APPLICANT: SIA, Dwo Yuan Charles
APPLICANT: KLEIN, Michel
TITLE OF INVENTION: HAEMOPHILUS OUTER MEMBRANE PROTEIN
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6TH Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,522A
FILING DATE: 12-SEP-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: STEWART, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-434 MIS:jb
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 797 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-433-522A-2

Query Match 7.0%; Score 75; DB 3; Length 797;
Best Local Similarity 19.4%; Pred. No. 16;
Matches 62; Conservative 49; Mismatches 88; Indels 120; Gaps 16;
QY 2 MKFLIIAAVAF--VAVSADP-----IHYDKITEIRKAL-----DDAIAAI 40
DB 1 MKKLLIASLLFGTTTTTTPAAPFVAXDIRVDGVQGDLEQQIRASLPVRAGQKRVTDNDVANI 60
QY 41 EOSEIT-----DPMKVPDHADKF-----ERHVGIVDFKG-----ELAMRNIEARGLKQM 84
DB 61 VRSFLVSGRFDVKAHQEGDVLVWSVAKSIISDVKIKGNSVIPTEALKQNLIDANGFK-- 118
QY 85 KRQGDANVKE-----EGIV-----KAHLILIGVHDDIVSMY 116
DB 119 --VGDVLRKLENEFAKSVKEHVASVGRYNAVTEPIVNTLPNNRAEILIQINEDDKAKLA 176
QY 117 DLAYKLG-----DLHPTT-----HVISDIQDF-----V 139
DB 177 SLTFKGNESVSSSTLQEQMELQPDSSWKLGNKFKGAQFEKDLQSIIRDYLYLNGYAKAQI 236
QY 140 VALSLSEISDEG--NITMTSFVRQF-----ANVNVHIGGLSI-LDPIFGVLSDLTAIFQ 191
DB 237 TKTDVQLNDEKTKVNTVDVNEGLQYDLRSARILGNLGMKSALEPLLSALH-----LN 290
QY 192 DTVRKEMTKVLAPAFKREL 210
DB 291 DTFRRSDIADVENAIKAKL 309

RESULT 96
US-08-433-522A-4
; Sequence 4, Application US/08433522A
; Patent No. 6013514
; GENERAL INFORMATION:

APPLICANT: CHONG, Pele
APPLICANT: THOMAS, Wayne
APPLICANT: YANG, Yan Ping
APPLICANT: LOOSMORE, Sheena
APPLICANT: SIA, Dwo Yuan Charles
APPLICANT: KLEIN, Michel
TITLE OF INVENTION: HAEMOPHILUS OUTER MEMBRANE PROTEIN
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6TH Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,522A
FILING DATE: 12-SEP-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: STEWART, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-434 MTS:jb
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 797 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-433-522A-4

Query Match 7.0%; Score 75; DB 3; Length 797;
Best Local Similarity 19.4%; Pred. No. 16;
Matches 62; Conservative 49; Mismatches 88; Indels 120; Gaps 16;
QY 2 MKELIIAAVAF---VAVSADP-----IHYDKITEINKAI-----DDAIAAI 40
Db 1 MKKLLIASLLFGTTTTFVFAAPFVAKDIRVDGVQGDLEQQIRASLPVRAGQRTDNDVANI 60
QY 41 EQSETI----DPMKVPDHDADF-----ERHVGIVDFKG-----ELAMRNIEARGLKQM 84
Db 61 VRSLSVSGRFDVKAHQEGDVLVSVVAKSIISDVKIKGNSVPTALKQNLNDANGFK-- 118
QY 85 KRQGDANVKE-----EGIV-----KAHLIGVHDDIVSMY 116
Db 119 --VGDVLIREKLNFEPAKSVKEHYASVGRYNATVEPIVNTLPNNRAELIQINEDDKAKLA 176
QY 117 DLAYKLG-----DLHPTT-----HVISDIQDF-----V 139
Db 177 SLTFKGNESVSSSTLQEQMLQDPSWKLGNKPEGAQFKDLSQIRDYLNNGYAKAQI 236
QY 140 VALSLEISDEG---NITMTSFEVRQF-----ANVVNHIGGLSI-LDPFGVLSVLTAFIQ 191
Db 237 TKTDVQLNDEKTKVNTVIDVNEGLQYDLRSARIIGNLGMGAELPLLSALH-----LN 290
QY 192 DTVRKEMTKVLAPAFKREL 210
Db 291 DTFRSDIADVENAIAKAL 309

RESULT 97
US-08-433-522A-6
; Sequence 6, Application US/08433522A
; Patent No. 6013514
; GENERAL INFORMATION:

APPLICANT: CHONG, Pele
APPLICANT: THOMAS, Wayne
APPLICANT: YANG, Yan Ping
APPLICANT: LOOSMORE, Sheena
APPLICANT: SIA, Dwo Yuan Charles
APPLICANT: KLEIN, Michel
TITLE OF INVENTION: HAEMOPHILUS OUTER MEMBRANE PROTEIN
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6TH Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,522A
FILING DATE: 12-SEP-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: STEWART, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-434 MIS:jb
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 797 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-433-522A-6

Query Match 7.0%; Score 75; DB 3; Length 797;
Best Local Similarity 19.4%; Pred. No. 16;
Matches 62; Conservative 49; Mismatches 88; Indels 120; Gaps 16;
QY 2 MKELIIAAVAF---VAVSADP-----IHYDKITEINKAI-----DDAIAAI 40
Db 1 MKKLLIASLLFGTTTTFVFAAPFVAKDIRVDGVQGDLEQQIRASLPVRAGQRTDNDVANI 60
QY 41 EQSETI----DPMKVPDHDADF-----ERHVGIVDFKG-----ELAMRNIEARGLKQM 84
Db 61 VRSLSVSGRFDVKAHQEGDVLVSVVAKSIISDVKIKGNSVPTALKQNLNDANGFK-- 118
QY 85 KRQGDANVKE-----EGIV-----KAHLIGVHDDIVSMY 116
Db 119 --VGDVLIREKLNFEPAKSVKEHYASVGRYNATVEPIVNTLPNNRAELIQINEDDKAKLA 176
QY 117 DLAYKLG-----DLHPTT-----HVISDIQDF-----V 139
Db 177 SLTFKGNESVSSSTLQEQMLQDPSWKLGNKPEGAQFKDLSQIRDYLNNGYAKAQI 236
QY 140 VALSLEISDEG---NITMTSFEVRQF-----ANVVNHIGGLSI-LDPFGVLSVLTAFIQ 191
Db 237 TKTDVQLNDEKTKVNTVIDVNEGLQYDLRSARIIGNLGMGAELPLLSALH-----LN 290
QY 192 DTVRKEMTKVLAPAFKREL 210
Db 291 DTFRSDIADVENAIAKAL 309

RESULT 98
US-09-135-166-2
; Sequence 2, Application US/09135166
; Patent No. 6083743
; GENERAL INFORMATION:

APPLICANT: CHONG, Pele
APPLICANT: THOMAS, Wayne
APPLICANT: YANG, Yan Ping
APPLICANT: LOOSMORE, Sheena
APPLICANT: SIA, Dwo Yuan Charles
APPLICANT: KLEIN, Michel
TITLE OF INVENTION: HAEMOPHILUS OUTER MEMBRANE PROTEIN
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6TH Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/135,166
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/433,522
FILING DATE: 12-SEP-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: STEWART, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-829 MIS:jb
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 797 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-135-166-2

Query Match 7.0%; Score 75; DB 3; Length 797;
Best Local Similarity 19.4%; Pred. No. 16;
Matches 62; Conservative 49; Mismatches 88; Indels 120; Gaps 16;
QY 2 MKFLIIAAVAF---VAVSADP-----IHYDKITEINKAI-----DDAIAAI 40
DB 1 MKKLLIASLLFGTTTTFVFAAPFVAKDIRVDGVQGLEQIRASLPVRAGQRTDNDVANI 60
QY 41 EOSETI---DPMKVPDHADKF-----ERHVGIVDFKG-----ELAMRNIEARGLKQM 84
DB 61 VRSFLVSGRFDVKAHQEGDVLVWSVAKSIISDVKIKGNSVITPEALKQNLNDANGFK-- 118
QY 85 KRQGDANYKGE-----EGIV-----KAHLIGVHDDIVSMY 116
DB 119 --VGDVLIREKLNFAKSVKEHYASVGRYNATVEIVNTLPNNRAEILIQINEDDKAKLA 176
QY 117 DLAYKLG-----DLHPTT-----HVISDIQDF-----V 139
DB 177 SLTFKGNESVSSSTLQEQMELOQDSNWKLMGNKFEAGQFCKDQSIQIRDYLLNNGYAKAI 236
QY 140 VALSLEISDEG---NITMTSFEVROF---ANVNHIGGLSI-LDPIFGVLSDLVLTAFQ 191
DB 237 TKTDVQLNDEKTKVNTIDVNEGLQYDLRSARIIGNLGMSAELEPLLSALH-----LN 290
QY 192 DTVRKEMTKVLAPAFKREL 210
DB 291 DTFRRSDIADVENAIAKAL 309

RESULT 99

US-09-135-166-4
Sequence 4, Application US/09135166
Patent No. 6083743
GENERAL INFORMATION:
APPLICANT: CHONG, Pele
APPLICANT: THOMAS, Wayne
APPLICANT: YANG, Yan Ping
APPLICANT: LOOSMORE, Sheena
APPLICANT: SIA, Dwo Yuan Charles
APPLICANT: KLEIN, Michel
TITLE OF INVENTION: HAEMOPHILUS OUTER MEMBRANE PROTEIN
NUMBER OF SEQUENCES: 55
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sim & McBurney
STREET: 6TH Floor, 330 University Avenue
CITY: Toronto
STATE: Ontario
COUNTRY: Canada
ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/135,166
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/433,522
FILING DATE: 12-SEP-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: STEWART, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-829 MIS:jb
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 797 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-135-166-4

Query Match 7.0%; Score 75; DB 3; Length 797;
Best Local Similarity 19.4%; Pred. No. 16;
Matches 62; Conservative 49; Mismatches 88; Indels 120; Gaps 16;
QY 2 MKFLIIAAVAF---VAVSADP-----IHYDKITEINKAI-----DDAIAAI 40
DB 1 MKKLLIASLLFGTTTTFVFAAPFVAKDIRVDGVQGLEQIRASLPVRAGQRTDNDVANI 60
QY 41 EOSETI---DPMKVPDHADKF-----ERHVGIVDFKG-----ELAMRNIEARGLKQM 84
DB 61 VRSFLVSGRFDVKAHQEGDVLVWSVAKSIISDVKIKGNSVITPEALKQNLNDANGFK-- 118
QY 85 KRQGDANYKGE-----EGIV-----KAHLIGVHDDIVSMY 116
DB 119 --VGDVLIREKLNFAKSVKEHYASVGRYNATVEIVNTLPNNRAEILIQINEDDKAKLA 176
QY 117 DLAYKLG-----DLHPTT-----HVISDIQDF-----V 139
DB 177 SLTFKGNESVSSSTLQEQMELOQDSNWKLMGNKFEAGQFCKDQSIQIRDYLLNNGYAKAI 236
QY 140 VALSLEISDEG---NITMTSFEVROF---ANVNHIGGLSI-LDPIFGVLSDLVLTAFQ 191
DB 237 TKTDVQLNDEKTKVNTIDVNEGLQYDLRSARIIGNLGMSAELEPLLSALH-----LN 290
QY 192 DTVRKEMTKVLAPAFKREL 210

Db 291 DTFRRSDIADVENAIAKAL 309

237 TKTDVQLNDEKTKVNVTTIDVNEGLQYDLRSARIIGNLGMGAELPLLSALH-----LN 290

QY 192 DTVRKEMTKVLAPAFKREL 210

Db 291 DTFRRSDIADVENAIAKAL 309

Search completed: August 6, 2004, 16:02:40

Job time : 24 secs

Db 291 DTFRRSDIADVENAIAKAL 309

RESULT 100

US-09-135-166-6

; Sequence 6, Application US/09135166

; Patent No. 6083743

; GENERAL INFORMATION:

; APPLICANT: CHONG, Pele

; APPLICANT: THOMAS, Wayne

; APPLICANT: YANG, Yan Ping

; APPLICANT: LOOSMORE, Sheena

; APPLICANT: SIA, Dwo Yuan Charles

; APPLICANT: KLEIN, Michel

; TITLE OF INVENTION: PHAMOPHILUS OUTER MEMBRANE PROTEIN

; NUMBER OF SEQUENCES: 55

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Sim & McBurney

; STREET: 6TH Floor, 330 University Avenue

; CITY: Toronto

; STATE: Ontario

; COUNTRY: Canada

; ZIP: M5G 1R7

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/135,166

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/433,522

; FILING DATE: 12-SEP-1995

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: STEWART, Michael I

; REGISTRATION NUMBER: 24,973

; REFERENCE/DOCKET NUMBER: 1038-829 MTS:jb

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (416) 595-1155

; TELEFAX: (416) 595-1163

; INFORMATION FOR SEQ ID NO: 6:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 797 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: protein

US-09-135-166-6

Query Match 7.0%; Score 75; DB 3; Length 797;

Best Local Similarity 19.4%; Pred. No. 16;

Matches 62; Conservative 49; Mismatches 88; Indels 120; Gaps 16;

QY 2 MKFLLIAAVAF---VAVSADP-----IHYDKITEINKAI-----DDAIAAI 40

Db 1 MKKLLIASLFGTTTTFVFAAPPVAKDIRVDGQDLEQQIRASLPVRAGQRTDNDVANI 60

QY 41 EQSETI----DPMKVPDHDKE-----ERHVGIVDFKG-----ELAMENIEARGLKQM 84

Db 61 VRSLFVSGRFDVVAHQEGDVLVVSVVAKSIISDVKIKGNSVIPTALKONLDANGFK-- 118

QY 85 KRQGDANVKGE-----EGIV-----KAHLIGVHDDIVSMEY 116

Db 119 --VGDVLIREKLNFAKSVKEHYASVGRYNATVEPIVNTLPNNRABILIQINEDDKAKLA 176

QY 117 DLAYKLG-----DLHPTT-----HVISDIQDP-----V 139

Db 177 SLTFKGNESVSSLTQEQMELQPSWKLWGNKFGAQFEKDLQSIQIRDYLLNNGYAKAQI 236

QY 140 VALSLRISDEG---NITMTSFEVRQF-----ANVNHIGGLSI-LDPIFGVLSDLVLTAFQ 191

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 6, 2004, 16:01:47 ; Search time 45 Seconds
(without alignments)
1484.766 Million cell updates/sec

Title: US-10-024-955-7
Perfect score: 1068
Sequence: 1 MMKFLIIAAVAVFVVSADPT.....VRKMTKVLPAFKRELEKN 213

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1291235 seqs, 313682936 residues

Total number of hits satisfying chosen parameters: 1291235

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database : Published Applications AA.*

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2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pap.*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pap.*
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5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pap.*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pap.*
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16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pap.*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pap.*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1068	100.0	213	10	US-09-847-208-77
2	1068	100.0	213	13	US-10-024-955-7
3	962	90.1	215	10	US-09-847-208-85
4	962	90.1	215	13	US-10-024-955-2
5	103	9.6	436	12	US-10-282-122A-72488
6	96	9.0	294	9	US-09-898-570-28
7	96	9.0	294	9	US-09-898-570-30
8	96	9.0	294	9	US-09-898-570-32
9	96	9.0	294	10	US-09-839-446-28
10	96	9.0	294	10	US-09-839-446-30
11	96	9.0	294	10	US-09-839-446-32
12	96	9.0	294	15	US-10-012-697-1496
13	96	9.0	314	12	US-10-220-120-411
14	96	9.0	314	16	US-10-363-829-419
15	95	8.9	293	12	US-10-424-599-241872

15	91.5	8.6	1397	12	US-10-282-122A-54874	Sequence 54874, A
17	90.5	8.5	541	15	US-10-369-493-9287	Sequence 9287, Ap
18	90.5	8.5	547	15	US-10-369-493-17524	Sequence 17524, A
19	90.5	8.5	944	12	US-10-282-122A-47806	Sequence 47806, A
20	90	8.4	1786	9	US-09-742-096-3	Sequence 3, Appli
21	90	8.4	1787	12	US-10-415-253-2	Sequence 2, Appli
22	88.5	8.3	405	12	US-09-925-298-445	Sequence 445, App
23	88.5	8.3	405	14	US-10-102-806-445	Sequence 445, App
24	88.5	8.3	459	14	US-10-177-293-140	Sequence 140, App
25	88	8.2	393	14	US-10-190-279-2	Sequence 2, Appli
26	88	8.2	436	10	US-09-769-744A-68	Sequence 68, Appl
27	88	8.2	436	12	US-10-282-122A-74126	Sequence 74126, A
28	88	8.2	436	14	US-10-190-379-5	Sequence 5, Appli
29	88	8.2	713	12	US-10-282-122A-71455	Sequence 71455, A
30	87.5	8.2	1361	15	US-10-369-493-3203	Sequence 3203, Ap
31	87	8.1	436	12	US-10-282-122A-74394	Sequence 74394, A
32	86.5	8.1	544	12	US-10-282-122A-77547	Sequence 77547, A
33	86.5	8.1	660	9	US-09-815-242-5470	Sequence 5470, Ap
34	86.5	8.1	664	9	US-09-815-242-12179	Sequence 12179, A
35	86	8.1	527	15	US-10-369-493-7810	Sequence 7810, Ap
36	85.5	8.0	903	15	US-10-369-493-1048	Sequence 1048, Ap
37	85.5	8.0	1018	15	US-10-108-260A-2998	Sequence 2998, Ap
38	85.5	8.0	1396	12	US-10-282-122A-55213	Sequence 55213, A
39	85.5	8.0	1441	12	US-10-346-863-6	Sequence 6, Appli
40	85.5	8.0	1441	16	US-10-408-765A-824	Sequence 824, App
41	85.5	8.0	2780	12	US-10-423-483-2	Sequence 2, Appli
42	85.5	8.0	2780	15	US-10-220-587-2	Sequence 2, Appli
43	85	8.0	878	15	US-10-369-493-18437	Sequence 18437, A
44	84.5	7.9	380	15	US-10-369-493-7985	Sequence 7986, Ap
45	84.5	7.9	817	12	US-10-282-122A-71072	Sequence 71072, A
46	83.5	7.8	281	12	US-10-424-599-160426	Sequence 160426, A
47	83.5	7.8	360	16	US-10-408-765A-1398	Sequence 1398, Ap
48	83.5	7.8	405	16	US-10-437-963-168034	Sequence 168034, A
49	83.5	7.8	412	9	US-09-738-626-3526	Sequence 3526, Ap
50	83.5	7.8	548	12	US-10-282-122A-78505	Sequence 78505, A
51	83.5	7.8	775	16	US-10-437-963-108571	Sequence 108671, A
52	83	7.8	551	16	US-10-437-963-134622	Sequence 134622, A
53	83	7.8	629	15	US-10-369-493-14521	Sequence 14521, A
54	83	7.8	630	15	US-10-369-493-14521	Sequence 14521, A
55	83	7.8	633	15	US-10-369-493-14213	Sequence 14213, A
56	83	7.8	633	15	US-10-369-493-14987	Sequence 14987, A
57	83	7.8	633	15	US-10-369-493-15263	Sequence 15263, A
58	83	7.8	633	16	US-10-389-566-1415	Sequence 1416, Ap
59	83	7.8	633	16	US-10-389-566-1559	Sequence 1559, Ap
60	83	7.8	845	9	US-09-874-923-110	Sequence 110, App
61	83	7.8	845	9	US-09-991-496-110	Sequence 110, App
62	82.5	7.7	856	16	US-10-437-963-106024	Sequence 106024, A
63	82.5	7.7	1399	15	US-10-369-493-13650	Sequence 13650, A
64	82.5	7.7	2339	15	US-10-116-275-244	Sequence 244, App
65	82.5	7.7	2498	12	US-10-092-900A-218	Sequence 218, App
66	82	7.7	397	15	US-10-289-762-894	Sequence 894, App
67	82	7.7	461	9	US-09-841-132-399	Sequence 399, App
68	82	7.7	461	12	US-10-282-122A-54983	Sequence 54983, A
69	82	7.7	785	9	US-09-738-626-5445	Sequence 5445, Ap
70	81.5	7.6	445	12	US-10-046-649-2	Sequence 2, Appli
71	81.5	7.6	547	14	US-10-282-122A-49547	Sequence 49547, A
72	81.5	7.6	745	15	US-10-369-493-2657	Sequence 2657, Ap
73	81.5	7.6	1279	12	US-10-282-122A-52455	Sequence 52455, A
74	81	7.6	222	12	US-10-424-599-197313	Sequence 197313, A
75	81	7.6	296	12	US-10-424-599-239257	Sequence 239257, A
76	81	7.6	385	10	US-09-991-138-12	Sequence 12, Appl
77	81	7.6	442	15	US-10-369-493-10081	Sequence 10081, A
78	81	7.6	545	12	US-10-282-122A-48944	Sequence 48944, A
79	81	7.6	767	12	US-10-221-625-23	Sequence 23, Appl
80	80.5	7.5	245	12	US-10-282-122A-57903	Sequence 57903, A
81	80.5	7.5	323	12	US-10-424-599-197424	Sequence 197424, A
82	80.5	7.5	324	16	US-10-437-963-166236	Sequence 166236, A
83	80.5	7.5	540	15	US-10-369-493-181	Sequence 181, App
84	80.5	7.5	540	15	US-10-369-493-181	Sequence 181, App
85	80	7.5	160	12	US-10-282-122A-56251	Sequence 56251, A
86	80	7.5	560	15	US-10-369-493-5550	Sequence 5550, Ap
87	80	7.5	720	15	US-10-437-963-144132	Sequence 144132, A
88	80	7.5	831	9	US-10-369-493-10217	Sequence 10217, A
					US-09-738-626-5468	Sequence 5468, Ap

89 Sequence 126, App
90 Sequence 68540, A
91 Sequence 73215, A
92 Sequence 75259, A
93 Sequence 76037, A
94 Sequence 44041, A
95 Sequence 10901, A
96 Sequence 53037, A
97 Sequence 148847, A
98 Sequence 126, App
99 Sequence 150, App
100 Sequence 149, App

89 7.5 3003 15 US-10-093-463-126
90 7.4 329 12 US-10-282-122A-68540
91 7.4 547 12 US-10-282-122A-73215
92 7.4 548 12 US-10-282-122A-75259
93 7.4 548 12 US-10-282-122A-76037
94 7.4 664 12 US-10-282-122A-44041
95 7.4 718 9 US-09-815-242-10901
96 7.4 722 12 US-10-282-122A-53037
97 7.4 786 16 US-10-437-963-148847
98 7.4 1006 15 US-10-369-493-126
99 7.4 1577 14 US-10-219-834-150
100 7.4 1615 14 US-10-219-834-149

ALIGNMENTS

RESULT 1

US-09-847-208-77
; Sequence 77, Application US/09847208
; Publication No. US20030082190A1
; GENERAL INFORMATION:
; APPLICANT: Saxon, Andrew
; APPLICANT: Zhang, Ke
; APPLICANT: Zhu, Daoheng
; TITLE OF INVENTION: FUSION MOLECULES AND TREATMENT OF
; FILE REFERENCE: IGE-MEDIATED ALLERGIC DISEASES
; CURRENT FILING DATE: 2001-05-01
; NUMBER OF SEQ ID NOS: 177
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 213
; TYPE: PRT
; ORGANISM: Dermatophagoides farinae (House-dust mite)

US-09-847-208-77

Query Match 100.0%; Score 1068; DB 10; Length 213;
Best Local Similarity 100.0%; Pred. No. 3.8e-102;
Matches 213; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKKFLIIAAVAFVAVSADPIHYDKITEINKAIDDAIAAEQSETIDPMKVPDADKFER 60
DB 1 MKKFLIIAAVAFVAVSADPIHYDKITEINKAIDDAIAAEQSETIDPMKVPDADKFER 60
QY 61 HVGIVDFKGLAMRNIEARGLQKMKRQGDANVKGEIGVKAHLIGVHDDIVSMEYDLAY 120
DB 61 HVGIVDFKGLAMRNIEARGLQKMKRQGDANVKGEIGVKAHLIGVHDDIVSMEYDLAY 120
QY 121 KLGDLPHTTHVLSIDIQDFVVALSLSEISDEGNITMTSEVROFANVNVHIGLSILDPIFG 180
DB 121 KLGDLPHTTHVLSIDIQDFVVALSLSEISDEGNITMTSEVROFANVNVHIGLSILDPIFG 180
QY 181 VLSDLVLTAFQDTVRKEMTKVLAPAFKRELEKN 213
DB 181 VLSDLVLTAFQDTVRKEMTKVLAPAFKRELEKN 213

RESULT 2

US-10-024-955-7
; Sequence 7, Application US/10024955
; Publication No. US20020168373A1
; GENERAL INFORMATION:
; APPLICANT: Wayne R. Thomas and Kaw-Yan Chua
; TITLE OF INVENTION: Allergenic Proteins and Peptides From
; CORRESPONDENCE ADDRESS:
; ADDRESS: LAHIVE & COCKFIELD, LLP
; STREET: 28 State Street
; CITY: Boston
; STATE: Massachusetts

COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/024,955
FILING DATE: 19-Dec-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/553,336A
FILING DATE: 10-JUN-1996
APPLICATION NUMBER: US 08/081,540
FILING DATE: 22-JUNE-1993
ATTORNEY/AGENT INFORMATION:
NAME: Jane E. Remillard
REGISTRATION NUMBER: 38,872
REFERENCE/DOCKET NUMBER: IMI-032CP2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
TELEFAX: (617)742-4214

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 213 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 7:

US-10-024-955-7

Query Match 100.0%; Score 1068; DB 13; Length 213;
Best Local Similarity 100.0%; Pred. No. 3.8e-102;
Matches 213; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1 MKKFLIIAAVAFVAVSADPIHYDKITEINKAIDDAIAAEQSETIDPMKVPDADKFER 60
QY 61 HVGIVDFKGLAMRNIEARGLQKMKRQGDANVKGEIGVKAHLIGVHDDIVSMEYDLAY 120
DB 61 HVGIVDFKGLAMRNIEARGLQKMKRQGDANVKGEIGVKAHLIGVHDDIVSMEYDLAY 120
QY 121 KLGDLPHTTHVLSIDIQDFVVALSLSEISDEGNITMTSEVROFANVNVHIGLSILDPIFG 180
DB 121 KLGDLPHTTHVLSIDIQDFVVALSLSEISDEGNITMTSEVROFANVNVHIGLSILDPIFG 180
QY 181 VLSDLVLTAFQDTVRKEMTKVLAPAFKRELEKN 213
DB 181 VLSDLVLTAFQDTVRKEMTKVLAPAFKRELEKN 213

RESULT 3

US-09-847-208-85
; Sequence 85, Application US/09847208
; Publication No. US20030082190A1
; GENERAL INFORMATION:
; APPLICANT: Saxon, Andrew
; APPLICANT: Zhang, Ke
; APPLICANT: Zhu, Daoheng
; TITLE OF INVENTION: FUSION MOLECULES AND TREATMENT OF
; FILE REFERENCE: IGE-MEDIATED ALLERGIC DISEASES
; CURRENT FILING DATE: 2001-05-01
; NUMBER OF SEQ ID NOS: 177
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 85
; LENGTH: 215
; TYPE: PRT
; ORGANISM: Dermatophagoides pteronysinus (House-dust mite)

US-09-847-208-85

Query Match 90.1%; Score 962; DB 10; Length 215;
Best Local Similarity 85.9%; Pred. No. 3.6e-91;
Matches 183; Conservative 18; Mismatches 12; Indels 0; Gaps 0;

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Db 1 MKKLLIIAAAFVAVSADPHYDKITEEINKAVDAVAIAEKSETFDPKVPDHSKFER 60
Qy 61 HVGIVDFKGLAMENIEARGLKQMKROGDANVKGEGIVKAHLIGVHDDIVSMEYDLAY 120
Db 61 HVGIVDFKGLAMENIEARGLKQMKROGDANVKGEGIVKAHLIGVHDDIVSMEYDLAY 120
Qy 61 HIGIIDLKGLDMENIQVRGLKQKRVGDANVKSSEDGVKAHLIGVHDDIVSMEYDLAY 120
Db 61 HIGIIDLKGLDMENIQVRGLKQKRVGDANVKSSEDGVKAHLIGVHDDIVSMEYDLAY 120
Qy 121 KLGLDHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEVROFANVNVNHHIGLSILDPIFG 180
Db 121 KLGLDHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEVROFANVNVNHHIGLSILDPIFG 180
Qy 181 VLSDLTAIFQDVTVRKEMTKVLAPAFKRELEKN 213
Db 181 VLSDLTAIFQDVTVRKEMTKVLAPAFKRELEKN 213

RESULT 4
US-10-024-955-2
; Sequence 2, Application US/10024955
; Publication No. US20020168373A1
; GENERAL INFORMATION:
; APPLICANT: Wayne R. Thomas and Kaw-Yan Chua
; TITLE OF INVENTION: Allergenic Proteins and Peptides From
; House Dust Mite and Uses Therefor
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD, LLP
; STREET: 28 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/024,955
; FILING DATE: 19-Dec-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/553,336A
; FILING DATE: 10-JUN-1996
; APPLICATION NUMBER: US 08/081,540
; FILING DATE: 22-JUNE-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Jane E. Remillard
; REGISTRATION NUMBER: 38,872
; REFERENCE/DOCKET NUMBER: IMI-032CP2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)742-4214
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 215 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-024-955-2

Query Match 90.1%; Score 962; DB 13; Length 215;
Best Local Similarity 85.9%; Pred. No. 3.6e-91;
Matches 183; Conservative 18; Mismatches 12; Indels 0; Gaps 0;

Qy 1 MKKFLIIAAAFVAVSADPHYDKITEEINKAIDDAIAAEQSETIDPMKVPDHSKFER 60

Db 1 MKKLLIIAAAFVAVSADPHYDKITEEINKAVDAVAIAEKSETFDPKVPDHSKFER 60
Qy 61 HVGIVDFKGLAMENIEARGLKQMKROGDANVKGEGIVKAHLIGVHDDIVSMEYDLAY 120
Db 61 HIGIIDLKGLDMENIQVRGLKQKRVGDANVKSSEDGVKAHLIGVHDDIVSMEYDLAY 120
Qy 121 KLGLDHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEVROFANVNVNHHIGLSILDPIFG 180
Db 121 KLGLDHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEVROFANVNVNHHIGLSILDPIFG 180
Qy 181 VLSDLTAIFQDVTVRKEMTKVLAPAFKRELEKN 213
Db 181 VLSDLTAIFQDVTVRKEMTKVLAPAFKRELEKN 213

RESULT 5
US-10-282-122A-72488
; Sequence 72488, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patentin version 3.1.
; SEQ ID NO 72488
; LENGTH: 436
; TYPE: PRT
; ORGANISM: Streptococcus mutans
US-10-282-122A-72488

Query Match 9.6%; Score 103; DB 12; Length 436;
Best Local Similarity 23.0%; Pred. No. 0.076;
Matches 50; Conservative 36; Mismatches 77; Indels 54; Gaps 11;

Qy 30 NKADDAIAAEQSETIDPMKVPDHSKFERHVGIVDFKGLAMENIEARGLKQMKROGD 89
Db 21 NRIAGERISIVDEGVTRDIYTKAENLAPQPSIIITGG---IDVDAPFMEIQKHQAD 77

QY 90 AN-----VKGEIGIVK-----AHLIGVHDDIV-----SMEDYL-AYK 121
 Db 78 IAMEADVIVPVSAGKIGITDADEYAKILYRTHKPVILAVKNDNPEMSAIYDFYALG 137
 QY 122 LGDLHP--TTHVI--SDIQFVW-ALSLEISDEGNITMTSFEVRQF-----ANV 166
 Db 138 LGDPYPVSSAGIGTGDVDAIVNLTPEAQEE-----SDLIKFLIGRPNVGKSLI 191
 QY 167 NHIGGLS--ILDPIFGVLSVLTALFQOTVRKEMTKV 201
 Db 192 NAILGEDRVIASPVAGITRDAITDTTDEBQGEFTMI 228

RESULT 6
 US-09-898-570-28
 ; Sequence 28, Application US/09898570
 ; Patent No. US20020123612A1
 ; GENERAL INFORMATION:
 ; APPLICANT: GERLACH, VALERIE L.
 ; APPLICANT: ELLERMAN, KAREN
 ; APPLICANT: MACDOUGALL, JOHN R.
 ; APPLICANT: SMITHSON, GLENDA
 ; TITLE OF INVENTION: NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES ENCODING THEM AND
 ; FILE REFERENCE: 15966-776CIP
 ; CURRENT APPLICATION NUMBER: US/09/898,570
 ; CURRENT FILING DATE: 2001-07-03
 ; PRIOR APPLICATION NUMBER: 60/198,293
 ; PRIOR FILING DATE: 2000-04-19
 ; PRIOR APPLICATION NUMBER: 60/198,645
 ; PRIOR FILING DATE: 2000-04-20
 ; PRIOR APPLICATION NUMBER: 60/210,809
 ; PRIOR FILING DATE: 2000-06-09
 ; PRIOR APPLICATION NUMBER: 60/199,476
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/200,025
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/224,610
 ; PRIOR FILING DATE: 2000-08-11
 ; PRIOR APPLICATION NUMBER: 60/200,024
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/199,880
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/218,591
 ; PRIOR FILING DATE: 2000-07-17
 ; PRIOR APPLICATION NUMBER: 60/271,814
 ; PRIOR FILING DATE: 2001-02-27
 ; PRIOR APPLICATION NUMBER: 60/215,855
 ; PRIOR FILING DATE: 2000-07-03
 ; PRIOR APPLICATION NUMBER: 09/839,446
 ; NUMBER OF SEQ ID NOS: 58
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 28
 ; LENGTH: 294
 ; TYPE: PRT
 ; ORGANISM: Unknown Organism
 ; FEATURE:
 ; OTHER INFORMATION: Description of Unknown Organism: POLYX
 ; OTHER INFORMATION: h_nh0778p17_A
 US-09-898-570-28

Query Match 9.0%; Score 96; DB 9; Length 294;
 Best Local Similarity 23.8%; Pred. No. 0.23;
 Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
 QY 27 BEINKAIDAAIAEQSETID-PMKV-----PDHAKDFERHVGIVDF-----KGE- 70
 Db 103 EYINSLNDLVKEVKSEVNGPSSVTRILKSQHAAMP-RHFQOIMFYNDTIAAKQEK 161
 QY 71 ---LAWRNIARG-----LQMKRQGDANYKGE-----GIVKAHL--LIGVHDDIVS 113
 Db 162 CKTFILRQLQEVAGKEMSEEDVNDMLHOGKWEVFNESLLTEINITKAQLSEIQRHKELVN 221
 QY 114 MEYDLAYKLGDLHPTHVVISDIQFVVALSLEISDEG-----NITMTSFEVRQFANVNH 169

Db 162 CKTFILRQLQEVAGKEMSEEDVNDMLHOGKWEVFNESLLTEINITKAQLSEIQRHKELVN 221
 QY 114 MEYDLAYKLGDLHPTHVVISDIQFVVALSLEISDEG-----NITMTSFEVRQFANVNH 169
 Db 222 LE-----NQIKDLRLFIQISLLVEEQGESINNIEMTNSTKEYVNNYK 267
 QY 170 GGLSI 174
 Db 268 FGLAV 272

RESULT 7
 US-09-898-570-30
 ; Sequence 30, Application US/09898570
 ; Patent No. US20020123612A1
 ; GENERAL INFORMATION:
 ; APPLICANT: GERLACH, VALERIE L.
 ; APPLICANT: ELLERMAN, KAREN
 ; APPLICANT: MACDOUGALL, JOHN R.
 ; APPLICANT: SMITHSON, GLENDA
 ; TITLE OF INVENTION: NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES ENCODING THEM AND
 ; FILE REFERENCE: 15966-776CIP
 ; CURRENT APPLICATION NUMBER: US/09/898,570
 ; CURRENT FILING DATE: 2001-07-03
 ; PRIOR APPLICATION NUMBER: 60/198,293
 ; PRIOR FILING DATE: 2000-04-19
 ; PRIOR APPLICATION NUMBER: 60/198,645
 ; PRIOR FILING DATE: 2000-04-20
 ; PRIOR APPLICATION NUMBER: 60/210,809
 ; PRIOR FILING DATE: 2000-06-09
 ; PRIOR APPLICATION NUMBER: 60/199,476
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/200,025
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/224,610
 ; PRIOR FILING DATE: 2000-08-11
 ; PRIOR APPLICATION NUMBER: 60/200,024
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/199,880
 ; PRIOR FILING DATE: 2000-04-26
 ; PRIOR APPLICATION NUMBER: 60/218,591
 ; PRIOR FILING DATE: 2000-07-17
 ; PRIOR APPLICATION NUMBER: 60/271,814
 ; PRIOR FILING DATE: 2001-02-27
 ; PRIOR APPLICATION NUMBER: 60/215,855
 ; PRIOR FILING DATE: 2000-07-03
 ; PRIOR APPLICATION NUMBER: 09/839,446
 ; NUMBER OF SEQ ID NOS: 58
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 30
 ; LENGTH: 294
 ; TYPE: PRT
 ; ORGANISM: Unknown Organism
 ; FEATURE:
 ; OTHER INFORMATION: Description of Unknown Organism: POLYX
 ; OTHER INFORMATION: hnh0778p17_A1
 US-09-898-570-30

Query Match 9.0%; Score 96; DB 9; Length 294;
 Best Local Similarity 23.8%; Pred. No. 0.23;
 Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
 QY 27 BEINKAIDAAIAEQSETID-PMKV-----PDHAKDFERHVGIVDF-----KGE- 70
 Db 103 EYINSLNDLVKEVKSEVNGPSSVTRILKSQHAAMP-RHFQOIMFYNDTIAAKQEK 161
 QY 71 ---LAWRNIARG-----LQMKRQGDANYKGE-----GIVKAHL--LIGVHDDIVS 113
 Db 162 CKTFILRQLQEVAGKEMSEEDVNDMLHOGKWEVFNESLLTEINITKAQLSEIQRHKELVN 221
 QY 114 MEYDLAYKLGDLHPTHVVISDIQFVVALSLEISDEG-----NITMTSFEVRQFANVNH 169

Db 222 LE-----NQIKDLRLDFIQISLLVEEQGESINNIEMTVNSTKEYVNTKEK 267
QY 170 GGLSI 174
Db 268 FGLAV 272

RESULT 8

US-09-898-570-32
; Sequence 32, Application US/09898570
; Patent No. US20020123612A1
; GENERAL INFORMATION:
; APPLICANT: GERLACH, VALERIE L.
; APPLICANT: ELLERMAN, KAREN
; APPLICANT: MACDOUGALL, JOHN R.
; APPLICANT: SMITHSON, GLENDA
; TITLE OF INVENTION: NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES ENCODING THEM AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 15966-776CIP
; CURRENT APPLICATION NUMBER: US/09/898,570
; CURRENT FILING DATE: 2001-07-03
; PRIOR APPLICATION NUMBER: 60/198,293
; PRIOR FILING DATE: 2000-04-19
; PRIOR APPLICATION NUMBER: 60/198,645
; PRIOR FILING DATE: 2000-04-20
; PRIOR APPLICATION NUMBER: 60/210,809
; PRIOR FILING DATE: 2000-06-09
; PRIOR APPLICATION NUMBER: 60/199,476
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/200,025
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/224,610
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: 60/200,024
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/199,880
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/218,591
; PRIOR FILING DATE: 2000-07-17
; PRIOR APPLICATION NUMBER: 60/271,814
; PRIOR FILING DATE: 2001-02-27
; PRIOR APPLICATION NUMBER: 60/215,855
; PRIOR FILING DATE: 2000-07-03
; PRIOR APPLICATION NUMBER: 09/839,446
; PRIOR FILING DATE: 2001-04-19
; NUMBER OF SEQ ID NOS: 58
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 32
; LENGTH: 294
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: POLYX
; OTHER INFORMATION: CG55655_02
US-09-898-570-32

Query Match 9.0%; Score 96; DB 9; Length 294;
Best Local Similarity 23.8%; Pred. No. 0.23;
Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
QY 27 EEINKAIDDAIAIEQSETID-PMKV-----PDHAKFERHVGIVDF-----KGE- 70
Db 103 EYINRSNLDLVKEVKXSEVNGPSSVTRILKSQAAMF-RHQOIMFYNDITIAAQEK 161
QY 71 ---LAMNTEARG-----LQMKKQGDANVKGE-----GIVKAHL--LIGVHDDIVS 113
Db 162 CKTFILRQLEAVAGKEMSEEDVNDMLHQGWKVEFVNESLLTEINITKAQLSEIQRHKELVN 221
QY 114 MEYDLAYKGLDHPHTTHVISDIDQDFVVALSLEISDEG-----NITMTSFEVROFANVNH 169
Db 222 LE-----NQIKDLRLDFIQISLLVEEQGESINNIEMTVNSTKEYVNTKEK 267

QY 170 GGLSI 174
Db 268 FGLAV 272

RESULT 9

US-09-839-446-28
; Sequence 28, Application US/09839446
; Publication No. US20030050232A1
; GENERAL INFORMATION:
; APPLICANT: GERLACH, VALERIE L.
; APPLICANT: ELLERMAN, KAREN
; APPLICANT: MACDOUGALL, JOHN R.
; APPLICANT: SMITHSON, GLENDA
; TITLE OF INVENTION: NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES ENCODING THEM AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 15966-776
; CURRENT APPLICATION NUMBER: US/09/839,446
; CURRENT FILING DATE: 2001-04-19
; PRIOR APPLICATION NUMBER: 60/198,293
; PRIOR FILING DATE: 2000-04-19
; PRIOR APPLICATION NUMBER: 60/198,645
; PRIOR FILING DATE: 2000-04-20
; PRIOR APPLICATION NUMBER: 60/210,809
; PRIOR FILING DATE: 2000-06-09
; PRIOR APPLICATION NUMBER: 60/199,476
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/200,025
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/224,610
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: 60/200,024
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/199,880
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/218,591
; PRIOR FILING DATE: 2000-07-17
; PRIOR APPLICATION NUMBER: 60/271,814
; PRIOR FILING DATE: 2001-02-27
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 28
; LENGTH: 294
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: POLYX
; OTHER INFORMATION: h_ph0778p17_A
US-09-839-446-28

Query Match 9.0%; Score 96; DB 10; Length 294;
Best Local Similarity 23.8%; Pred. No. 0.23;
Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
QY 27 EEINKAIDDAIAIEQSETID-PMKV-----PDHAKFERHVGIVDF-----KGE- 70
Db 103 EYINRSNLDLVKEVKXSEVNGPSSVTRILKSQAAMF-RHQOIMFYNDITIAAQEK 161
QY 71 ---LAMNTEARG-----LQMKKQGDANVKGE-----GIVKAHL--LIGVHDDIVS 113
Db 162 CKTFILRQLEAVAGKEMSEEDVNDMLHQGWKVEFVNESLLTEINITKAQLSEIQRHKELVN 221
QY 114 MEYDLAYKGLDHPHTTHVISDIDQDFVVALSLEISDEG-----NITMTSFEVROFANVNH 169
Db 222 LE-----NQIKDLRLDFIQISLLVEEQGESINNIEMTVNSTKEYVNTKEK 267
QY 170 GGLSI 174
Db 268 FGLAV 272

RESULT 10
US-09-839-446-30

; Sequence 30, Application US/09839446
; Publication No. US20030050232A1
; GENERAL INFORMATION:
; APPLICANT: GERLACH, VALERIE L.
; APPLICANT: ELLERMAN, KAREN
; APPLICANT: MACDOUGALL, JOHN R.
; APPLICANT: SMITHSON, GLENDA
; TITLE OF INVENTION: NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES ENCODING THEM AND
; METHODS OF USING THE SAME
; FILE REFERENCE: 15966-776
; CURRENT APPLICATION NUMBER: US/09/839,446
; CURRENT FILING DATE: 2001-04-19
; PRIOR APPLICATION NUMBER: 60/198,293
; PRIOR FILING DATE: 2000-04-19
; PRIOR APPLICATION NUMBER: 60/198,645
; PRIOR FILING DATE: 2000-04-20
; PRIOR APPLICATION NUMBER: 60/210,809
; PRIOR FILING DATE: 2000-06-09
; PRIOR APPLICATION NUMBER: 60/199,476
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/200,025
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/224,610
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: 60/200,024
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/199,880
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/218,591
; PRIOR FILING DATE: 2000-07-17
; PRIOR APPLICATION NUMBER: 60/271,814
; PRIOR FILING DATE: 2001-02-27
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 30
; LENGTH: 294
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: POLYX
; OTHER INFORMATION: hh0778p7_A1
US-09-839-446-30

Query Match 9.0%; Score 96; DB 10; Length 294;
Best Local Similarity 23.8%; Pred. NO. 0.23;
Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
QY 27 EEINKAIDDAIAAEQSETID-PMKV-----PHADKFERHVGIVDF-----KGE- 70
DB 103 EYINSLNDLVKVKSEVNGPSSVTRILKSQAAMP-RHFOQIMFYNDTIAAKQEK 161
QY 71 ---LAWRNIEARG-----LQMKRQGDANVKGE-----GIVKAHL--LIGVHDDIVS 113
DB 162 CKTFILRQLEVAGKEMSEEDVNDMLHQKWEVFNESLLTEINITKAQLSEIEQRHKLNV 221
QY 114 MEYDLAYKGLDHPHTHVISDIQDFVALSLEISDEG-----NITMTSFEVRQFANVNH 169
DB 222 LE-----NQIKDLRDLFIQISLLVEEQGESINNIENTVNSTKEYVYVNTK 267
QY 170 GGLSI 174
DB 268 FGLAV 272
RESULT 11
US-09-839-446-32
; Sequence 32, Application US/09839446
; Publication No. US20030050232A1
; GENERAL INFORMATION:
; APPLICANT: GERLACH, VALERIE L.
; APPLICANT: ELLERMAN, KAREN
; APPLICANT: MACDOUGALL, JOHN R.
; APPLICANT: SMITHSON, GLENDA

; TITLE OF INVENTION: NOVEL HUMAN PROTEINS, POLYNUCLEOTIDES ENCODING THEM AND
; METHODS OF USING THE SAME
; FILE REFERENCE: 15966-776
; CURRENT APPLICATION NUMBER: US/09/839,446
; CURRENT FILING DATE: 2001-04-19
; PRIOR APPLICATION NUMBER: 60/198,293
; PRIOR FILING DATE: 2000-04-19
; PRIOR APPLICATION NUMBER: 60/198,645
; PRIOR FILING DATE: 2000-04-20
; PRIOR APPLICATION NUMBER: 60/210,809
; PRIOR FILING DATE: 2000-06-09
; PRIOR APPLICATION NUMBER: 60/199,476
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/200,025
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/224,610
; PRIOR FILING DATE: 2000-08-11
; PRIOR APPLICATION NUMBER: 60/200,024
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/199,880
; PRIOR FILING DATE: 2000-04-26
; PRIOR APPLICATION NUMBER: 60/218,591
; PRIOR FILING DATE: 2000-07-17
; PRIOR APPLICATION NUMBER: 60/271,814
; PRIOR FILING DATE: 2001-02-27
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 32
; LENGTH: 294
; TYPE: PRT
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: POLYX
; OTHER INFORMATION: CG55655_02
US-09-839-446-32

Query Match 9.0%; Score 96; DB 10; Length 294;
Best Local Similarity 23.8%; Pred. NO. 0.23;
Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
QY 27 EEINKAIDDAIAAEQSETID-PMKV-----PHADKFERHVGIVDF-----KGE- 70
DB 103 EYINSLNDLVKVKSEVNGPSSVTRILKSQAAMP-RHFOQIMFYNDTIAAKQEK 161
QY 71 ---LAWRNIEARG-----LQMKRQGDANVKGE-----GIVKAHL--LIGVHDDIVS 113
DB 162 CKTFILRQLEVAGKEMSEEDVNDMLHQKWEVFNESLLTEINITKAQLSEIEQRHKLNV 221
QY 114 MEYDLAYKGLDHPHTHVISDIQDFVALSLEISDEG-----NITMTSFEVRQFANVNH 169
DB 222 LE-----NQIKDLRDLFIQISLLVEEQGESINNIENTVNSTKEYVYVNTK 267
QY 170 GGLSI 174
DB 268 FGLAV 272
RESULT 12
US-10-012-697-1496
; Sequence 1496, Application US/10012697
; Publication No. US20030215803A1
; GENERAL INFORMATION:
; APPLICANT: Escobedo, Jaime
; APPLICANT: Garcia, Pablo Dominguez
; APPLICANT: Kassam, Altaf
; APPLICANT: Lamson, George
; APPLICANT: Scott, Beth
; APPLICANT: Drmanac, Radoje
; APPLICANT: Crkvenjakov, Radomir
; APPLICANT: Dickson, Mark
; APPLICANT: Drmanac, Snezana
; APPLICANT: Labat, Ivan
; APPLICANT: Leshkowitz, Dena

; APPLICANT: Kita, David
; APPLICANT: Garcia, Veronica
; APPLICANT: Jones, Lee William
; APPLICANT: Stache-Crain, Birgit
; TITLE OF INVENTION: HUMAN GENES AND GENE EXPRESSION PRODUCTS
; TITLE OF INVENTION: ISOLATED FROM HUMAN PROSTATE
; FILE REFERENCE: 2300-16252
; CURRENT APPLICATION NUMBER: US/10/012,697
; CURRENT FILING DATE: 2003-01-21
; PRIOR APPLICATION NUMBER: 60/254,648
; PRIOR FILING DATE: 2000-12-07
; PRIOR APPLICATION NUMBER: 60/275,668
; PRIOR FILING DATE: 2001-03-13
; NUMBER OF SEQ ID NOS: 1568
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1496
; LENGTH: 294
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-012-697-1496

Query Match 9.0%; Score 96; DB 15; Length 294;
Best Local Similarity 23.8%; Pred. No. 0.23; Indels 52; Gaps 10;
Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
QY 27 EEINKAIDDAIAAEQSETID-PMKV-----PDHAKKPERHVGIVDF-----KGE- 70
DB 103 EYINRSLNDLVKVEKSEVNGSPSVVTRILKSHAAMP-RHFQIMFIYNDITAAKQEK 161
QY 71 ---LAMRNIARG-----LKMQRQGDANVKGE-----GIVKAHL--LIGVHDDIVS 113
DB 162 CKTFILRLQLEVAGKEMSEEDVNDMLHQKWEVFNESLLTEINITKAQLSEIQRHKELVN 221
QY 114 MEYDLAYKLGDLHPTTHVISDIQDFVVALSLEISDEG-----NITMTSFVROFANVNVHI 169
DB 222 LE-----NQIKDLRDLFIQISLLVEEQGESINNIEMVTNSTKEYVYNTKEK 267
QY 170 GGLSI 174
DB 268 FGLAV 272

RESULT 13
US-10-220-120-411
; Sequence 411, Application US/10220120
; Publication No. US20040048253A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: PANZER, Scott R.
; APPLICANT: SPIRO, Peter A.
; APPLICANT: BANVILLE, Steven C.
; APPLICANT: SHAH, Furvi
; APPLICANT: CHALUP, Michael S.
; APPLICANT: CHANG, Simon C.
; APPLICANT: CHEN, Alice
; APPLICANT: D'SA, Steven A.
; APPLICANT: AMSHEY, Stefan
; APPLICANT: DAHL, Christopher R.
; APPLICANT: DAM, Tam C.
; APPLICANT: DANIELS, Susan E.
; APPLICANT: DUFOUR, Gerard E.
; APPLICANT: FLORES, Vincent
; APPLICANT: FONG, Willy T.
; APPLICANT: GREENAWALT, Lila B.
; APPLICANT: HILLMAN, Jennifer L.
; APPLICANT: JONES, Anissa L.
; APPLICANT: LIU, Tommy F.
; APPLICANT: ROSEBERRY, Ann M.
; APPLICANT: ROSEN, Bruce H.
; APPLICANT: RUSSO, Frank D.
; APPLICANT: STOCKDREHER, Theresa K.
; APPLICANT: DAFFO, Abel
; APPLICANT: WRIGHT, Rachel J.

; APPLICANT: YAP, Pierre E.
; APPLICANT: YU, Jimmy Y.
; APPLICANT: BRADLEY, Diana L.
; APPLICANT: BRADLEY, Shawn R.
; APPLICANT: CHEN, Wensheng
; APPLICANT: COHEN, Howard J.
; APPLICANT: HODGSON, David M.
; APPLICANT: LINCOLN, Stephen E.
; APPLICANT: JACKSON, Stuart
; TITLE OF INVENTION: MOLECULES FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: PT-1113 PCT
; CURRENT APPLICATION NUMBER: US/10/220,120
; CURRENT FILING DATE: 2002-08-26
; PRIOR APPLICATION NUMBER: 60/184,777; 60/184,797; 60/184,698; 60/184,773; 60/184,776;
60/184,769; 60/184,768; 60/184,837; 60/184,833; 60/184,841;
60/184,772; 60/185,213; 60/185,216; 60/204,863; 60/205,221;
60/204,815; 60/203,785; 60/204,821; 60/204,908; 60/204,226;
60/204,525; 60/205,285; 60/205,232; 60/205,323; 60/205,387;
60/205,324; 60/205,286
; PRIOR FILING DATE: 2000-02-24; 2000-02-24; 2000-02-24; 2000-02-24; 2000-02-24;
2000-02-24; 2000-02-24; 2000-02-24; 2000-02-24; 2000-02-24;
2000-02-24; 2000-02-24; 2000-02-24; 2000-02-24; 2000-02-24;
2000-05-17; 2000-05-12; 2000-05-16; 2000-05-16; 2000-05-15;
2000-05-16; 2000-05-17; 2000-05-16; 2000-05-17; 2000-05-17;
2000-05-17; 2000-05-17
; NUMBER OF SEQ ID NOS: 422
; SOFTWARE: PERL Program
; SEQ ID NO 411
; LENGTH: 314
; TYPE: PRT
; ORGANISM: Homo sapiens
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20040048253A1 LG:204626.1.orfi:2000MAY19
US-10-220-120-411

Query Match 9.0%; Score 96; DB 12; Length 314;
Best Local Similarity 23.8%; Pred. No. 0.25;
Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
QY 27 EEINKAIDDAIAAEQSETID-PMKV-----PDHAKKPERHVGIVDF-----KGE- 70
DB 123 EYINRSLNDLVKVEKSEVNGSPSVVTRILKSHAAMP-RHFQIMFIYNDITAAKQEK 181
QY 71 ---LAMRNIARG-----LKMQRQGDANVKGE-----GIVKAHL--LIGVHDDIVS 113
DB 182 CKTFILRLQLEVAGKEMSEEDVNDMLHQKWEVFNESLLTEINITKAQLSEIQRHKELVN 241
QY 114 MEYDLAYKLGDLHPTTHVISDIQDFVVALSLEISDEG-----NITMTSFVROFANVNVHI 169
DB 242 LE-----NQIKDLRDLFIQISLLVEEQGESINNIEMVTNSTKEYVYNTKEK 287
QY 170 GGLSI 174
DB 288 FGLAV 292

RESULT 14
US-10-363-829-449
; Sequence 449, Application US/10363829
; Publication No. US2004014233A1
; GENERAL INFORMATION:
; APPLICANT: JACKSON, Stuart E.; LINCOLN, Stephen E.;
; APPLICANT: ALTUS, Christina M.; DUFOUR, Gerard E.;
; APPLICANT: CHALUP, Michael S.; JACKSON, Jennifer L.;
; APPLICANT: JONES, Anissa L.; YU, Jimmy Y.;
; APPLICANT: WRIGHT, Rachel J.; GIETZEN, Darryl;
; APPLICANT: LIU, Tommy F.; YAP, Pierre E.;
; APPLICANT: DAHL, Christopher R.; MOMIYAMA, Monika G.;
; APPLICANT: BRADLEY, Diana L.; ROHATGI, Sameer D.;
; APPLICANT: HARRIS, Bernard; ROSEBERRY LINCOLN, Ann M.;

APPLICANT: Gerstin, Jr., Edward H.; Peralta, Careyna H.;
APPLICANT: David, Marie H.; Panzer, Scott R.;
APPLICANT: Flores, Vincent Z.; Daffo, Abel;
APPLICANT: Marwaha, Rakesh; Chen, Alice J.;
APPLICANT: Chang, Simon C.; Au, Alan P.;
APPLICANT: Iman, Rebekah R.
TITLE OF INVENTION: MOLECULES FOR DISEASE DETECTION AND TREATMENT
FILE REFERENCE: PT-1183 USN
CURRENT APPLICATION NUMBER: US/10/363,829
CURRENT FILING DATE: 2003-03-05
PRIOR APPLICATION NUMBER: PCT/US01/27628
PRIOR FILING DATE: 2001-09-05
PRIOR APPLICATION NUMBER: US 60/229,751
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 60/229,749
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 60/229,750
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 60/229,747
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 60/229,748
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 60/230,583
PRIOR FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: US 60/230,517
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: US 60/230,610
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: US 60/230,597
PRIOR FILING DATE: 2000-09-06
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 506
SOFTWARE: PERL Program
SEQ ID NO 449
LENGTH: 314
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No: LI:204626.1.orf1:2000SEP08
US-10-363-829-449

Query Match 9.0%; Score 96; DB 16; Length 314;
Best Local Similarity 23.8%; Pred. No. 0.25;
Matches 44; Conservative 31; Mismatches 58; Indels 52; Gaps 10;
QY 27 BEINKAIDATAAEQSTID-PMKV-----PDHAKFERHVGIVDP-----KGE-70
DB 123 EYINSLNDLVKEVKSEVNGSPSVVTRILKSQAAMF-RHQOIMFIYNDITAAKOEK 181
QY 71 ---LAWRNIEARG-----LKQMKROGDANVKGE-----GIVKAHL--LIGVHDDIVS 113
DB 182 KTFILRQLLEVANGKEMSESDVNDMLHQKWEVFNESLLTEINITKAQLSEIQPHKELVN 241
QY 114 MEYDLAYKGLDHPHTHVISIQDFVVALSEISDEG-----NIMTSEFVRQFANVNH 169
DB 242 LE-----NQIKDLRLFIQISLLVEQGESINNIENTVNTKEYNNTKEX 287
QY 170 GGLSI 174
DB 288 FGLAV 292

RESULT 15
US-10-424-599-241872
Sequence 241872, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 241872
LENGTH: 293
TYPE: PRT
ORGANISM: Glycine max
FEATURE:
OTHER INFORMATION: Clone ID: PAT_MRT3847_60438C.1.pep
US-10-424-599-241872
Query Match 8.9%; Score 95; DB 12; Length 293;
Best Local Similarity 20.7%; Pred. No. 0.29;
Matches 47; Conservative 41; Mismatches 89; Indels 50; Gaps 6;
QY 2 MFLIIAAVAFVAVSADPIHYDKITEIEINKAIDDAIAAEQSETIDPMKVPDHDKFERH 61
DB 63 LRFLRLSEVA-----EKLOQAISIQKQENYAREMLFORKKVLQALDKSKRR 111
QY 62 VGIVDFKGLAWRNTEARGLKQMKQGDANVKBEQIVKAHLI-----GVHDDIVSM 114
DB 112 IEVLID---ELSKSLSEALSLESQIGNVTIVKIEDSTEDASSPVRIIAPEEVQNDVTKD 168
QY 115 EYDLAYKGLDGLHPTTHVISDIQD-----FVVALSLEISDEGNITMT 155
DB 169 ESD-----PDMEFSDIQDVOLSTESBGSPLDDKETQHLLLESLSISNEEYIARN 219
QY 156 SFEVRQFANVNHIG-GLSILDPIFGLVSLDVLTAIFQDVTREKMTKV 201
DB 220 LSEISSYDEDMEHIDKLSLEAEALVTVLNVSTLVLNDEERPNRSRL 266
RESULT 16
US-10-282-122A-54874
Sequence 54874, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Cart, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09

```
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 54874
; LENGTH: 1397
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-282-122A-54874

Query Match
Best Local Similarity 8.6%; Score 91.5; DB 12; Length 1397;
Matches 53; Conservative 35; Mismatches 63; Indels 99; Gaps 12;

QY 36 AIAAIEQSETHDP-----EARGLKQ-----MKVPDHADKFERHVGIVD 66
Db 1110 AIIISVEGQVDPGMLLRLPRGAIKTKDITGGLPRVAELVEARKPEDAAIAKIDGWD 1169
QY 67 FKGLAMRN1-----EARGLKQ-----MKRGDANVKE---EGIVKAHLI--- 105
Db 1170 FKGIQKRLVIVCDENWEEHEHLPLTKHLIVQRGDSVIRGQQLTDGLVWPHLEIIC 1229
QY 106 GVND--DIVSMEYDLAYKLGLDHPHTTHVISDIQDFVVAL-----SLEISDEGNITMTS 156
Db 1230 GVRELQKYLNEQVYRLQGV-----DINDKHEIIVRQWLQKVRITDPDITLL- 1280
QY 157 FEVRQFANVN-----HIGQ-----LSILDPIFGVLSVLTAFIQTIVR 195
Db 1281 -----FGEDVKNKEFYENRRTBEDGKPAQAVPVLGITKASLTGTFISAAFSQDT-- 1333
QY 196 KEMTKVLAPA 205
Db 1334 ---TRVLTD 1340

RESULT 17
US-10-369-493-9287
; Sequence 9287, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; PRIOR FILING DATE: 2003-02-28
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 9287
; LENGTH: 541
; TYPE: PRT
; ORGANISM: Xylella fastidiosa
US-10-369-493-9287

Query Match
Best Local Similarity 8.5%; Score 90.5; DB 15; Length 541;
Matches 54; Conservative 43; Mismatches 87; Indels 53; Gaps 12;

QY 13 VAVSADPIHYDKITEINKAIDDA-IAAIEQSETHDPKVPDHADKFERHVGIVDFKGE 71
Db 107 VAAGNPM-----DLKRGIDKAVIAAVTELKISK---PTSDDKAIAQVATISANSD 156
QY 72 AMNIEARGLKQMKRGDANVKEGIVKAHLIIGVHDDIVSMEYDLAY----- 120
Db 157 SIGNIIAEMKKVKGEGVITI--EETTLENEL-----DVVEGMQFDRGYSSPYFINNQ 210
QY 121 ---KLGLDHPHTH--VISDIQDFVVALSLEISDEGNITMTSFEVRQFA---NVNHNIGL 172
Db 211 QIVELDNPIYLLHDKKISSVRDLTVLDVAVAKESKPLLIIVAEVEGEALATLVVNIRGI 270
QY 173 -----SILDPIFG-----VLSVDL-----TAIFQD---TVRKEMTKVLAPAFKRELEK 212
Db 271 IKVCAVKAPGFGDRRKAMLEDMAVLTGTVISEBVLSEKATTSHLGKAKKVRVSK 327

RESULT 18
US-10-369-493-17524
; Sequence 17524, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; PRIOR FILING DATE: 2003-02-28
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 17524
; LENGTH: 547
; TYPE: PRT
; ORGANISM: Xylella fastidiosa
US-10-369-493-17524

Query Match
Best Local Similarity 8.5%; Score 90.5; DB 15; Length 547;
Matches 54; Conservative 43; Mismatches 87; Indels 53; Gaps 12;

QY 13 VAVSADPIHYDKITEINKAIDDA-IAAIEQSETHDPKVPDHADKFERHVGIVDFKGE 71
Db 107 VAAGNPM-----DLKRGIDKAVIAAVTELKISK---PTSDDKAIAQVATISANSD 156
QY 72 AMNIEARGLKQMKRGDANVKEGIVKAHLIIGVHDDIVSMEYDLAY----- 120
Db 157 SIGNIIAEMKKVKGEGVITI--EETTLENEL-----DVVEGMQFDRGYSSPYFINNQ 210
QY 121 ---KLGLDHPHTH--VISDIQDFVVALSLEISDEGNITMTSFEVRQFA---NVNHNIGL 172
Db 211 QIVELDNPIYLLHDKKISSVRDLTVLDVAVAKESKPLLIIVAEVEGEALATLVVNIRGI 270
QY 173 -----SILDPIFG-----VLSVDL-----TAIFQD---TVRKEMTKVLAPAFKRELEK 212
Db 271 IKVCAVKAPGFGDRRKAMLEDMAVLTGTVISEBVLSEKATTSHLGKAKKVRVSK 327

RESULT 19
US-10-282-122A-47806
; Sequence 47806, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
```

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; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 54874
; LENGTH: 1397
; TYPE: PRT
; ORGANISM: Chlamydia pneumoniae
US-10-282-122A-54874

Query Match
Best Local Similarity 8.6%; Score 91.5; DB 12; Length 1397;
Matches 53; Conservative 35; Mismatches 63; Indels 99; Gaps 12;

QY 36 AIAAIEQSETHDP-----EARGLKQ-----MKVPDHADKFERHVGIVD 66
Db 1110 AIIISVEGQVDPGMLLRLPRGAIKTKDITGGLPRVAELVEARKPEDAAIAKIDGWD 1169
QY 67 FKGLAMRN1-----EARGLKQ-----MKRGDANVKE---EGIVKAHLI--- 105
Db 1170 FKGIQKRLVIVCDENWEEHEHLPLTKHLIVQRGDSVIRGQQLTDGLVWPHLEIIC 1229
QY 106 GVND--DIVSMEYDLAYKLGLDHPHTTHVISDIQDFVVAL-----SLEISDEGNITMTS 156
Db 1230 GVRELQKYLNEQVYRLQGV-----DINDKHEIIVRQWLQKVRITDPDITLL- 1280
QY 157 FEVRQFANVN-----HIGQ-----LSILDPIFGVLSVLTAFIQTIVR 195
Db 1281 -----FGEDVKNKEFYENRRTBEDGKPAQAVPVLGITKASLTGTFISAAFSQDT-- 1333
QY 196 KEMTKVLAPA 205
Db 1334 ---TRVLTD 1340

RESULT 17
US-10-369-493-9287
; Sequence 9287, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; PRIOR FILING DATE: 2003-02-28
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 9287
; LENGTH: 541
; TYPE: PRT
; ORGANISM: Xylella fastidiosa
US-10-369-493-9287

Query Match
Best Local Similarity 8.5%; Score 90.5; DB 15; Length 541;
Matches 54; Conservative 43; Mismatches 87; Indels 53; Gaps 12;

QY 13 VAVSADPIHYDKITEINKAIDDA-IAAIEQSETHDPKVPDHADKFERHVGIVDFKGE 71
Db 107 VAAGNPM-----DLKRGIDKAVIAAVTELKISK---PTSDDKAIAQVATISANSD 156
QY 72 AMNIEARGLKQMKRGDANVKEGIVKAHLIIGVHDDIVSMEYDLAY----- 120
Db 157 SIGNIIAEMKKVKGEGVITI--EETTLENEL-----DVVEGMQFDRGYSSPYFINNQ 210
QY 121 ---KLGLDHPHTH--VISDIQDFVVALSLEISDEGNITMTSFEVRQFA---NVNHNIGL 172
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; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 47806
; LENGTH: 944
; TYPE: PRT
; ORGANISM: Burkholderia cepacia
US-10-282-122A-47806

Query Match      8.5%; Score 90.5; DB 12; Length 944;
Best Local Similarity 27.1%; Pred. No. 4.5;
Matches 29; Conservative 19; Mismatches 52; Indels 7; Gaps 2;

QY 45 TIDPMKVPDHPADKFERHVGIVDFK---GELAMRNIEARGLKQMKROGDANVKGEIGVK 100
DB 357 TLDIVGAPVNGANANRPIRTIFRDRMGNLKVQHTPTVTRFRDRKGRDRTVKYRTPPT 416

QY 101 ARLHLLGVHDDIVSMYDLYAYKLGDLH---PPTHVISDIQDFVWALS 144
DB 417 AGIALGUTPDVVVSFFDYKAGRLMAEHGVNGIVEYVLDALDNTTIAL 463

RESULT 20
US-09-742-096-3
; Sequence 3, Application US/09742096
; Patent No. US2002015541A1
; GENERAL INFORMATION:
; APPLICANT: DRUILHE, PIERRE
; TITLE OF INVENTION: MALARIAL PRE-ERYTHROCYTIC STAGE POLYPEPTIDE MOLECULES
; FILE REFERENCE: 200773US01V
; CURRENT APPLICATION NUMBER: US/09/742,096
; CURRENT FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: US 08/573,642
; PRIOR FILING DATE: 1998-02-06
; PRIOR APPLICATION NUMBER: PCT/FR96/00894
; PRIOR FILING DATE: 1996-06-12
; PRIOR APPLICATION NUMBER: FR 95/07007
; PRIOR FILING DATE: 1995-06-13
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 1786
; TYPE: PRT
; ORGANISM: P. falciparum
US-09-742-096-3

Query Match      8.4%; Score 90; DB 9; Length 1786;
Best Local Similarity 23.3%; Pred. No. 13;
Matches 47; Conservative 43; Mismatches 78; Indels 34; Gaps 9;

QY 22 YDKITEINKAIDDAIAAEQSETIDPMKVPDHPADKFERHVGIVDFKGEAMRNIEARGL 81
DB 979 FNTVLDKVEETVEISGESLENNE---MDKAPFSEIFDNVKGQENLLTGMFRSISIV 1034

QY 82 KQMKROGDANVKGEIGVKAHLIGVHDDIVSMYDLYAYKLGDLHPTHTHVISDIQDFVVA 141
DB 1035 IQSEKQVDLN---ENVVSSIL---DNIENKKGLLNKLKLENISSTEGVQETVTEHV-- 1083

QY 142 LSLEISDEGNITWTSFEV-----RQANVNVNHHIGGLS-----ILDPIFGVLSVLTAA--IFQ 191
DB 1084 -----EQNV-YVDVDPAMKQDFLIGILNEAGLKGEMFNLEDVFKSESVDVITVEIKD 1135

QY 192 DTVRKEMTKVLAPAPKRELEKN 213
DB 1136 EPVQKEVEKETVSIIE-EMEEN 1156

RESULT 22
US-09-925-298-445
; Sequence 445, Application US/09925298
; Publication No. US20020039764A1
; GENERAL INFORMATION:
; APPLICANT: ROSEN ET AL.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA103
; CURRENT APPLICATION NUMBER: US/09/925,298
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05881
; PRIOR FILING DATE: 2000-03-08

```

; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 846
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 445
; LENGTH: 405
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-298-445

Query Match 8.3%; Score 88.5; DB 12; Length 405;
Best Local Similarity 24.6%; Pred. No. 2.2;
Matches 30; Conservative 25; Mismatches 50; Indels 17; Gaps 3;

Qy 18 DPHYDKITEINKAIDDAIAAEQSETI-----DPMKVPDHD-KPERHV 62
Db 21 DKFSFDLKGGEVIRKAWDIAIAIMKVGCHITCKPEYAGSAGSPKIPPNATLVFE--V 78

Qy 63 GIVDFKGLAMRNIEARGLKMKQGDANVKGEIGVKAHLIGVHDDIVSMYDLYAKL 122
Db 79 ELFEFKGEDLTEDDGGIIRRIQTRGEGYAKPNEGAIVEVALEGGYKDKLFDQRELRFEI 138

Qy 123 GD 124
Db 139 GE 140

RESULT 23

; Sequence 445, Application US/10102806
; Publication No. US2003005442A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: P103P1C1
; CURRENT APPLICATION NUMBER: US/10/102,806
; PRIOR FILING DATE: 2002-03-22
; PRIOR APPLICATION NUMBER: 09/925,298
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05881
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 846
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 445
; LENGTH: 405
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-102-806-445

Query Match 8.3%; Score 88.5; DB 14; Length 405;
Best Local Similarity 24.6%; Pred. No. 2.2;
Matches 30; Conservative 25; Mismatches 50; Indels 17; Gaps 3;

Qy 18 DPHYDKITEINKAIDDAIAAEQSETI-----DPMKVPDHD-KPERHV 62
Db 21 DKFSFDLKGGEVIRKAWDIAIAIMKVGCHITCKPEYAGSAGSPKIPPNATLVFE--V 78

Qy 63 GIVDFKGLAMRNIEARGLKMKQGDANVKGEIGVKAHLIGVHDDIVSMYDLYAKL 122
Db 79 ELFEFKGEDLTEDDGGIIRRIQTRGEGYAKPNEGAIVEVALEGGYKDKLFDQRELRFEI 138

Qy 123 GD 124
Db 139 GE 140

RESULT 24

; Sequence 140, Application US/10177293
; Publication No. US20030124128A1
; GENERAL INFORMATION:

; APPLICANT: Lillie, James
; APPLICANT: Glatt, Karen
; APPLICANT: Zhao, Xumei
; APPLICANT: Gannavarpu, Manjula
; APPLICANT: Kamackar, Shubhangi
; APPLICANT: Mertens, Maureen
; APPLICANT: Myer, Vic
; APPLICANT: Wang, Youzhen
; APPLICANT: Xu, Yongyao
; APPLICANT: Hoersch, Sebastian
; APPLICANT: Monahan, John
; APPLICANT: Meyers, Rachel E.
; APPLICANT: East Jr., Robert C.
; APPLICANT: Hortobagyi, Gabriel N.
; APPLICANT: Pusztai, Lajos
; APPLICANT: Meric, Funda
; APPLICANT: Sahin, Aysegul
; APPLICANT: Mills, Gordon B.
; TITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT,
; FILE REFERENCE: PREVENTION, AND THERAPY OF BREAST CANCER
; FILE REFERENCE: MRI-038
; CURRENT APPLICATION NUMBER: US/10/177,293
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,887
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/301,572
; PRIOR FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: US 60/306,501
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: US 60/325,002
; PRIOR FILING DATE: 2001-09-25
; PRIOR APPLICATION NUMBER: US 60/362,585
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/xxx,xxx
; NUMBER OF SEQ ID NOS: 506
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 140
; LENGTH: 459
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-177-293-140

Query Match 8.3%; Score 88.5; DB 14; Length 459;
Best Local Similarity 24.6%; Pred. No. 2.6;
Matches 30; Conservative 25; Mismatches 50; Indels 17; Gaps 3;

Qy 18 DPHYDKITEINKAIDDAIAAEQSETI-----DPMKVPDHD-KPERHV 62
Db 75 DKFSFDLKGGEVIRKAWDIAIAIMKVGCHITCKPEYAGSAGSPKIPPNATLVFE--V 132

Qy 63 GIVDFKGLAMRNIEARGLKMKQGDANVKGEIGVKAHLIGVHDDIVSMYDLYAKL 122
Db 133 ELFEFKGEDLTEDDGGIIRRIQTRGEGYAKPNEGAIVEVALEGGYKDKLFDQRELRFEI 192

Qy 123 GD 124
Db 193 GE 194

RESULT 25

US-10-190-279-2
; Sequence 2, Application US/10190279
; Publication No. US20030096267A1
; GENERAL INFORMATION:
; APPLICANT: Fritz, Christian
; APPLICANT: Youngman, Philip
; APPLICANT: Guzman, Luz-Maria
; TITLE OF INVENTION: ESSENTIAL BACTERIAL GENES AND THEIR USE
; FILE REFERENCE: 06286-088001
; CURRENT APPLICATION NUMBER: US/10/190,279
; CURRENT FILING DATE: 2002-07-05
; PRIOR APPLICATION NUMBER: US/09/393,858

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; PRIOR FILING DATE: 1999-09-09
; PRIOR APPLICATION NUMBER: 60/099,578
; PRIOR FILING DATE: 1998-09-09
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 393
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
US-10-190-279-2

Query Match      8.2%; Score 88; DB 14; Length 393;
Best Local Similarity 21.8%; Pred. No. 2.3; Mismatches 89; Indels 42; Gaps 8;
Matches 46; Conservative 34;

QY 30 NKAIDDAIAAEQSTIDPMKVPDADKFERHVGIVDFKGLAMNIEARGLKQMKRQGD 89
DB 21 NRIAGERISIVEDVEGTRDIATGEWLNRSFMSIDTGG---IDVDAPFMEQIKHQA 77
QY 90 AN-----VKGEIGIVK-----AHLIGVHDDIV-----SMEYDL-----AYK 121
DB 78 IAMEEADVIVFVSGEGITDADEYVARKLYKTHKPVILAVNKVDNPEMRNDIYDFVALG 137
QY 122 LGDLHPHTHV-----ISDIQDFVVALSLEISDEGNITMTSFEVROFANV-----VNHI 172
DB 138 LGEPLPISSVHGIGTGDVLDIAVENLPNEYEEENPDVVKFSLIGRPNVGKSSLINAILGE 197
QY 173 S--ILDPFGVLSVLTAFQDFTVRKEMTKV 201
DB 198 DRVIASPVAGTTRDAIDTFTDTCQEFMTI 228

RESULT 26
US-09-769-744A-68
; Sequence 68, Application US/09769744A
; Publication No. US20030134407A1
; GENERAL INFORMATION:
; APPLICANT: Le Page, Richard WF
; APPLICANT: Wells, Jeremy M
; APPLICANT: Hanniffy, Sean B
; APPLICANT: Hansbro, Philip M
; TITLE OF INVENTION: Proteins
; FILE REFERENCE: PWC/P21122WO
; CURRENT APPLICATION NUMBER: US/09/769,744A
; CURRENT FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: PCT/GB99/02452
; PRIOR FILING DATE: 1999-07-27
; PRIOR APPLICATION NUMBER: GB 9816336.3
; PRIOR FILING DATE: 1998-07-27
; PRIOR APPLICATION NUMBER: US 60/125329
; PRIOR FILING DATE: 1999-03-19
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 68
; LENGTH: 436
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
US-09-769-744A-68

Query Match      8.2%; Score 88; DB 10; Length 436;
Best Local Similarity 21.8%; Pred. No. 2.7; Mismatches 89; Indels 42; Gaps 8;
Matches 46; Conservative 34;

QY 30 NKAIDDAIAAEQSTIDPMKVPDADKFERHVGIVDFKGLAMNIEARGLKQMKRQGD 89
DB 21 NRIAGERISIVEDVEGTRDIATGEWLNRSFMSIDTGG---IDVDAPFMEQIKHQA 77
QY 90 AN-----VKGEIGIVK-----AHLIGVHDDIV-----SMEYDL-----AYK 121
DB 78 IAMEEADVIVFVSGEGITDADEYVARKLYKTHKPVILAVNKVDNPEMRNDIYDFVALG 137
QY 122 LGDLHPHTHV-----ISDIQDFVVALSLEISDEGNITMTSFEVROFANV-----VNHI 172
DB 138 LGEPLPISSVHGIGTGDVLDIAVENLPNEYEEENPDVVKFSLIGRPNVGKSSLINAILGE 197
QY 173 S--ILDPFGVLSVLTAFQDFTVRKEMTKV 201
DB 198 DRVIASPVAGTTRDAIDTFTDTCQEFMTI 228

RESULT 27
US-10-282-122A-74126
; Sequence 74126, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Chlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Cart, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 74126
; LENGTH: 436
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
US-10-282-122A-74126

Query Match      8.2%; Score 88; DB 12; Length 436;
Best Local Similarity 21.8%; Pred. No. 2.7; Mismatches 89; Indels 42; Gaps 8;
Matches 46; Conservative 34;

QY 30 NKAIDDAIAAEQSTIDPMKVPDADKFERHVGIVDFKGLAMNIEARGLKQMKRQGD 89
DB 21 NRIAGERISIVEDVEGTRDIATGEWLNRSFMSIDTGG---IDVDAPFMEQIKHQA 77
QY 90 AN-----VKGEIGIVK-----AHLIGVHDDIV-----SMEYDL-----AYK 121
DB 78 IAMEEADVIVFVSGEGITDADEYVARKLYKTHKPVILAVNKVDNPEMRNDIYDFVALG 137
QY 122 LGDLHPHTHV-----ISDIQDFVVALSLEISDEGNITMTSFEVROFANV-----VNHI 172
DB 138 LGEPLPISSVHGIGTGDVLDIAVENLPNEYEEENPDVVKFSLIGRPNVGKSSLINAILGE 197
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QY 173 S--ILDPFVGLSDVLTALFQDTRKEMTKV 201
Db 198 DRVASFVAGTTRDAIDTHFTDGDQEFMTI 228

RESULT 28

US-10-190-279-5
; Sequence 5, Application US/10190279
; Publication No. US20030096267A1
; GENERAL INFORMATION:
; APPLICANT: Fritze, Christian
; APPLICANT: Youngman, Philip
; APPLICANT: Guzman, Luz-Maria
; TITLE OF INVENTION: ESSENTIAL BACTERIAL GENES AND THEIR USE
; FILE REFERENCE: 06286-088001
; CURRENT APPLICATION NUMBER: US/10/190,279
; CURRENT FILING DATE: 2002-07-05
; PRIOR APPLICATION NUMBER: US/09/393,858
; PRIOR FILING DATE: 1999-09-09
; PRIOR APPLICATION NUMBER: 60/099,578
; PRIOR FILING DATE: 1998-09-09
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 436
; TYPE: PRT
; ORGANISM: Streptococcus pneumoniae
US-10-190-279-5

Query Match 8.2%; Score 88; DB 14; Length 436;
Best Local Similarity 21.8%; Pred. No. 2.7; Mismatches 89; Indels 42; Gaps 8;
Matches 46; Conservative 34;
QY 30 NKADDAIAAIEQSETIDPKVPHADKFERHVGIVDFKGLAMRNIEARGLKQMRQGD 89
Db 21 NRIAGERISIVDEGVTRDRIYATGEWLNRSFSDTGG---IDDVDAPFMEQIKHQA 77
QY 90 AN-----VKREGIVK-----AHLIGVHDDIV-----SMEYDL----AYK 121
Db 78 IAMEEADVIVFVVGKGGITDAEYVARKLYTKHKPVILAVNKVDNPMRNDIYDYALG 137
QY 122 LGDLHPHTHY-----ISDIOFVVALSLEISDEGNITWTSFVVRQFANV-----VNHIGGL 172
Db 138 LGPELPFSSVHGIGTGDLDAIVENLPNEYEEENPDVKFSLIGRNVGKSSLIINAILGE 197
QY 173 S--ILDPFVGLSDVLTALFQDTRKEMTKV 201
Db 198 DRVASFVAGTTRDAIDTHFTDGDQEFMTI 228

RESULT 29

US-10-282-122A-71455
; Sequence 71455, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21

; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 71455
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Staphylococcus haemolyticus
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (711)..(711)
; OTHER INFORMATION: X=any amino acid
US-10-282-122A-71455

Query Match 8.2%; Score 88; DB 12; Length 713;
Best Local Similarity 19.4%; Pred. No. 5.5;
Matches 60; Conservative 51; Mismatches 94; Indels 104; Gaps 14;
QY 3 KFLIAAFAVAVGADPRHYDKITEE-----INKAIDDAI--AAIEQSETIDPKKVP 52
Db 33 KVVWALGHVTHAQPHYDKAYKEWKLDELPIPKRMQTVVIGTKSKQFKTKVSLIL- 91
QY 53 DHADKFERHVGI---VDFKGLAMRNI--EARGLKQMRQGDANVKG---EEGIVK---- 100
Db 92 ---DKKKEVITATDAGREGELVARLILDKVHNKKPKRLWISSVTKKAIQEGFKLKD 148
QY 101 -----AHLIGVH-DDIVSMEYDLAYKGLDLH-PTTHVIS-----DIQDFV 139
Db 149 REFQHYEAALARSEADWVGINATRALTTKYDQSLGRVQVTTIQLVNRARQOEINHF 208
QY 140 VALSLEISDE-GNIT-----MTSFEVRQFANVYVNHIGG-----LSILDPIF 179
Db 209 AKKYTLSTEIGGLTFQLSTNKHQTKEDATQIANEIKHVEGNVDSEKVKYKSHKPKLY 268
QY 180 GVL-----SDVLTALFQDTRKEMTKV 202
Db 269 NLTDLQEQAYORYKMGPKETLNTIQLYERHKVLTYPRTDSNYLTDDMDVTIKERLY 328
QY 203 APAFKRELE 211
Db 329 ATDYKSQVK 337

RESULT 30

US-10-369-493-3209
; Sequence 3209, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xiaofeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10 (52052)B

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; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 3209
; LENGTH: 1361
; TYPE: PRT
; ORGANISM: Neurospora crassa
US-10-369-493-3209

```

Query Match	8.2%;	Score 87.5;	DB 15;	Length 1361;
Best Local Similarity	27.8%;	Pred. No. 16;		
Matches	40;	Conservative 19;	Mismatches 62;	Indels 23; Gaps 6
Qy	26	TBEINKAIDDATAAEEQSET--ID-PMKVPDPAKDFSRHVGIVDFKGEIAGLRNIEARGLK 82		
Db	213	TYDLNQTIKDTKAKUKQKETEILIDKKKHQRDLTLEK--TIAEKQTTLAQKETELENLK 270		
Qy	83	QMKRQGDANVKGEIGVIRKAHL--IGVHDDIVSMYEDLAYKLGD-----L 125		
Db	271	AQRNRWNTWNTNEEIGDKTAELLKKEGELRDL-RQKYDDAQKLADGSKERDKLAIQAQYKII 329		
Qy	126	HPPTHVISDIQDFVVALSLEISDE 149		
Db	330	ATKTSLELEKAKDVAALTKDVNDQ 353		

```

RESULT 31
US-10-282-122A-74394
; Sequence 74394, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haseibeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.

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; LENGTH: 436.
; TYPE: PROT
; ORGANISM: Streptococcus pyogenes
US-10-282-122A-74394

Query Match      8.1%; Score 87; DB 12; Length 436;
Best Local Similarity 22.2%; Pred. No. 3.4;
Matches 41; Conservative 41; Mismatches 80; Indels

Qy 30 NKAIRDDAIAAEQSETIDPMKVPDPAHDKFERHVGIVDPKGLAMENIAR
Db 21 NRIAGERISIVEDVEGTRDRIYATGEWLNQRFSLIDTGG---IDDVAP
Qy 89 -----DAN-----VZGEGIVKAH-----LLIGYHD-DIVSNE
Db 78 IAMEEADVYFVWSGKEGVTDADEYVSKILYRTNTPVILAVNKVDNPEMR
Qy 122 LGDLHPHTHV----ISDIQDPWA-LSLEIGDEGNIWTMTSPFVRCFANY-
Db 138 LGDYPFVSSVHGIGTGVLDLDAIVENLPVEEAEE-NDDIIRFSLIGRPNVG
Qy 172 LS---ILDPIFGVLSDLVLTATFQDTVRKEMTKV 201
Db 197 EDRIYASFGVAGTTRDAIDTHTFDAGGSFTMI 228

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RESULT 32
US-10-282-122A-77547
Sequence 77547, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 77547
LENGTH: 544
TYPE: PRT

```


; ORGANISM: Vibrio cholerae
US-10-282-122A-77547

Query Match 8.1%; Score 86.5; DB 12; Length 544;
Best Local Similarity 24.4%; Pred. No. 5.3;
Matches 41; Conservative 21; Mismatches 69; Indels 37; Gaps 5;
QY 6 LIAAVAFVAVSA-----DPIHYKITEEINKAIDDAIAAEQSETIDPMKV 51
DB 372 LAGGAVAVKVGATEVEMKEKORVEDALHATRAAVEGVAGGVALTRAASKLSLV- 430
QY 52 PDHADKFERHVGIVDFKGLAMNIEARGLKQMKROGDA-----NVKGEIGVKAHLI 105
DB 431 ---GDNEEQVGI-----RVALLAMEAPLRQIVKNAGDEESVANNVRAGEGNYNAAT 482
QY 106 GVHDDIVSMEYDLAYLGLDHPHTTHVDSIDQDFWVALLSLEISDEGNIT 153
DB 483 GYVGDMEIEM-----GILDPTKVTRESALQPAASVAGLMTITMERMIT 522

RESULT 33
US-09-815-242-5470
; Sequence 5470, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; TITLE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5470
; LENGTH: 660
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-815-242-5470

Query Match 8.1%; Score 86.5; DB 9; Length 660;
Best Local Similarity 22.2%; Pred. No. 7;
Matches 36; Conservative 31; Mismatches 50; Indels 45; Gaps 5;
QY 1 MMKFLIIAAVAFVAVSADPIHYKITEEINKAIDDAIAAEQSETIDPMKV----- 51
DB 354 IFSLLMIALVSFVAMAFGNKYETPTDVIGSKVKEA-----EQIFKNKNLKLGISRSYSD 409
QY 52 -----PDHADKFER--HVGIVDFKG-----ELAMNIEARGLKQ 84
DB 410 KYPENEIIKTPNTGERVERGSDVDVVISKGPVKMPNVIGLPKQALQKLKSLGKDV 469
QY 85 KRQGDANVKGEGI-----VKAHLLIGVHDDIVSMEYDLAYK 121

DB 470 KIEKYNNQAPGYIANGQSVTANTEIAIHDSNIKLYESLGK 511

RESULT 34
US-09-815-242-12179
; Sequence 12179, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; TITLE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12179
; LENGTH: 664
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-815-242-12179

Query Match 8.1%; Score 86.5; DB 9; Length 664;
Best Local Similarity 22.2%; Pred. No. 7.1;
Matches 36; Conservative 31; Mismatches 50; Indels 45; Gaps 5;
QY 1 MMKFLIIAAVAFVAVSADPIHYKITEEINKAIDDAIAAEQSETIDPMKV----- 51
DB 355 IFSLLMIALVSFVAMAFGNKYETPTDVIGSKVKEA-----EQIFKNKNLKLGISRSYSD 410
QY 52 -----PDHADKFER--HVGIVDFKG-----ELAMNIEARGLKQ 84
DB 411 KYPENEIIKTPNTGERVERGSDVDVVISKGPVKMPNVIGLPKQALQKLKSLGKDV 470
QY 85 KRQGDANVKGEGI-----VKAHLLIGVHDDIVSMEYDLAYK 121
DB 471 KIEKYNNQAPGYIANGQSVTANTEIAIHDSNIKLYESLGK 512

RESULT 35
US-10-369-493-7810
; Sequence 7810, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Caco, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xiaofeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES

FILE REFERENCE: 38-10(52052)B
CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 7810
LENGTH: 527
TYPE: PRT
ORGANISM: Rhodobacter sphaeroides
US-10-369-493-7810

Query Match 8.1%; Score 86; DB 15; Length 527;
Best Local Similarity 23.5%; Pred. No. 5.7;
Matches 40; Conservative 26; Mismatches 66; Indels 38; Gaps 6;
QY 66 DFKGLANRNIEARGLKQKQGDANVKGEGIVKAHL-----LIGVHDDIVSMEYD 117
DB 274 DAAGERATRDVVSRIYAEKMSNTSENGGVYISMAHLGPDVRRRFGKMGVRCADCGFD 333
QY 118 LAYKGLDLHPTTH-----VISDIQDFWALSLEISDEGNITWTSFEVRQFANVNHIG 170
DB 334 LAGGLVEVPYAHYFMGCVVDPDTRTEIDGLHVGEDAGG-----AHGANRLG 382
QY 171 GLSILD-PIF-GVLSDLVTA-----IPQTVRKEMTKVLAPAFKR 208
DB 383 GNGVANSTVFGGIAGDVNGAEVASIRHLRPADEAVLAAEIDRAMAPLSKR 432

RESULT 36
US-10-369-493-1048
Sequence 1048, Application US/10369493
Publication No. US20030233675A1
GENERAL INFORMATION:
APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
FILE REFERENCE: 38-10(52052)B
CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 1048
LENGTH: 903
TYPE: PRT
ORGANISM: Methanococcus jannaschii
US-10-369-493-1048

Query Match 8.0%; Score 85.5; DB 15; Length 903;
Best Local Similarity 25.0%; Pred. No. 14;
Matches 53; Conservative 30; Mismatches 90; Indels 39; Gaps 11;
QY 23 DKITEINKAIDD-----AIAAEQSEITDPMKV-PDHADKFERHVGIVDFKGLAM 73
DB 571 DKVNNQLITELDGMEEPKDVVVIATNRPDIIIDALLRPGRLRVIL-VPVDFEKLADI 629
QY 74 RNIEARGLKQKQGDANV---KGEIGIVKAHL-----LIGVHDDIVSMEYDLAYK 121
DB 630 FKIHTR---SMNLAEVDNLEELAKTEGTCGADTEALCREAAMLAVERSI-GKWDIEVK 685
QY 122 LGDLHPTTHVISDIQDFWALSLEISDEGNIT--WTSEVRQFANVNHIGLSILDPF 179
DB 686 LREL---INYLQSIGTTPRAAAVELNSVIAKTERESAAGEFSELKNAIG-----KII 736
QY 180 GVLSDVLTAIFQDTVRKEMTKVLAPAFKRELE 211
DB 737 SVLSPAKSKI--EAVEKEIDKFLVEINKLELK 766

RESULT 37
US-10-108-260A-2998
Sequence 2998, Application US/10108260A
Publication No. US20040005560A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: NO. US20040005560A1el full length cdna
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2998
LENGTH: 1018
TYPE: PRT
ORGANISM: Homo sapiens
US-10-108-260A-2998

Query Match 8.0%; Score 85.5; DB 15; Length 1018;
Best Local Similarity 22.0%; Pred. No. 17;
Matches 50; Conservative 35; Mismatches 81; Indels 61; Gaps 14;
QY 20 IHVDKI--TEEKALDDAIAAEQSEITDPMK-----VPOHADKFERHV-----GIVDF 67
DB 786 LHRDITVQTLTQPSVKGLIYVEDSPLVKAHLGHLVVDKAPNTVILKTLVE- 844
QY 68 KGELAM---RNIEARGLKQKQGDANVKGEGIVKAH-----LLIGVHDDIVSMEYDLA 119
DB 845 NGEMILLADGRRIVA-----NSANVNGRENVVVHPDFRMIVLANRPGPFPLGNDFF 895
QY 120 YKGLDLHPTTHVISD-----IQDFVVALS--LEISDEGNITWTS 156
DB 896 GTLGDI-F-SCHAVDNPKPHELEMLRQYQGNVPPILOKLVAAFGELSLADQGIINY-P 953
QY 157 FEVRQFANVNHIGLSILDPIFGVLSDLVTAIFQ-DTVRKEMTKVL 202
DB 954 YSTREVVNIVKHLQKF-----PTEG-LSSVVRNVFDFDSVYNDMDREIL 995

RESULT 38
US-10-282-122A-55213
Sequence 55213, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23

; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 55213
; LENGTH: 1396
; TYPE: PRT
; ORGANISM: Chlamydia trachomatis
US-10-282-122A-55213

Query Match 8.0%; Score 85.5; DB 12; Length 1396;
Best Local Similarity 23.8%; Pred. No. 26; Mismatches 66; Indels 59; Gaps 12;
Matches 49; Conservative 34

43 SETIDPMKVPDHDADKPERHVGIVDFKGLAMRNI-----EARGLQK-----MKRQ 87
1145 AELVEARKEDAAD-TAKIDGVDFKGIQKRIILVVRDEVGTGMBEHLISLTKHLIVQR 1203
88 GDANVKE---EGIVKAHLI---GVHD---DIVSMYDLAYKGLDHPHTTHVISDIQDFV 139
1204 GDSVIRGOQLTDLGVVPEHLEICGVRELQYLVNEVQEVYRLOQV-----DINDKH 1255
140 VAL-----SLDISDEGNITM---TSFEVROFANV---VNHIGG-----LSILDP 177
1256 IEIIVRQMLQKVRITDPGDTLLFGEDVDKKEFYENRTEEDGGKPAQAVPVLGITKA 1315
178 IFGLVSDVLTATPQDTRKEMTKVLAPA 205
1316 SLGTESFISAASFQDT-----TRVLTDA 1338

RESULT 39
US-10-346-863-6
; Sequence 6, Application US/10346863
; Publication No. US20040038325A1
; GENERAL INFORMATION:
; APPLICANT: PHELPS, CHRISTOPHER BENJAMIN
; APPLICANT: FAGAN, RICHARD JOSEPH
; APPLICANT: GUTTERIDGE, ALEX
; TITLE OF INVENTION: ADHESION MOLECULES
; FILE REFERENCE: 674575-2001
; CURRENT APPLICATION NUMBER: US/10/346,863
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: PCT/GB01/03318
; PRIOR FILING DATE: 2001-07-24
; PRIOR APPLICATION NUMBER: GB 0018126.3
; PRIOR FILING DATE: 2000-07-24
; PRIOR APPLICATION NUMBER: GB 0025447.4
; PRIOR FILING DATE: 2000-10-17
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 1441
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-346-863-6

Query Match 8.0%; Score 85.5; DB 12; Length 1441;
Best Local Similarity 22.0%; Pred. No. 27; Mismatches 81; Indels 61; Gaps 14;
Matches 50; Conservative 35

20 IHYDKI--TBEINKAIDDAIAAEQSETIDPMK-----VPDHADKFERHV-----GIVDF 67
343 LHRDITVQTLTLPQSVKGLIVYEDSPLVKAVKLGHLVVDKADKAPTNTVCTILKTLVE- 401
68 KGELAM---RNIEARGLKQMKRGDANVKEEGIVKAH-----LLIGVHDDIVSMYDILA 119

US-10-408-765A-824
; Sequence 824, Application US/10408765A
; Publication No. US20040101874A1
; GENERAL INFORMATION:
; APPLICANT: Ghosh, Soumitra S.
; APPLICANT: Fahy, Eoin D.
; APPLICANT: Zhang, Bing
; APPLICANT: Gibson, Bradford W.
; APPLICANT: Taylor, Steven W.
; APPLICANT: Glenn, Gary M.
; APPLICANT: Watson, Dale E.
; TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
; TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
; FILE REFERENCE: 660088.465
; CURRENT APPLICATION NUMBER: US/10/408,765A
; CURRENT FILING DATE: 2003-04-04
; NUMBER OF SEQ ID NOS: 3077
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 824
; LENGTH: 1441
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-765A-824

Query Match 8.0%; Score 85.5; DB 16; Length 1441;
Best Local Similarity 22.0%; Pred. No. 27; Mismatches 81; Indels 61; Gaps 14;
Matches 50; Conservative 35

20 IHYDKI--TBEINKAIDDAIAAEQSETIDPMK-----VPDHADKFERHV-----GIVDF 67
343 LHRDITVQTLTLPQSVKGLIVYEDSPLVKAVKLGHLVVDKADKAPTNTVCTILKTLVE- 401
68 KGELAM---RNIEARGLKQMKRGDANVKEEGIVKAH-----LLIGVHDDIVSMYDILA 119
402 NGEMILADGRIVA-----NSANVNGRENVVVIHPDFRMIVLANRPGFPLGNDFF 452
120 YKLGDLHPTTHVISD-----IQDFVVALS---LEISDEGNITM 156
453 GTLGDIF-SCHAVDNPKEHSEMLRQYGNVPEPIQLKLVAAFGELRSLADQGIINY-P 510
157 FEVRQFANVNVNHIGLSILDPIFGVLSDLVLTAFQ-DTVRKEMTKVL 202
511 YSTREVNIVKHLOKF-----PTEG-LSSVVRNVDFDSYNNDMREIL 552

RESULT 41
US-10-423-483-2
; Sequence 2, Application US/10423483
; Publication No. US2003026154A1
; GENERAL INFORMATION:
; APPLICANT: Ptacek, Louis
; APPLICANT: White, H. Steve
; APPLICANT: Fu, Ying-Hui
; APPLICANT: Skradski, Shana
; TITLE OF INVENTION: MASS 1 GENE, A TARGET FOR ANTICONVULSANT DRUG DEVELOPMENT
; FILE REFERENCE: 1321.2.53
; CURRENT APPLICATION NUMBER: US/10/423,483
; CURRENT FILING DATE: 2003-04-25
; PRIOR APPLICATION NUMBER: US/10/220,587
; PRIOR FILING DATE: 2002-12-02

US-10-423-483-2
; Sequence 2, Application US/10423483
; Publication No. US2003026154A1
; GENERAL INFORMATION:
; APPLICANT: Ptacek, Louis
; APPLICANT: White, H. Steve
; APPLICANT: Fu, Ying-Hui
; APPLICANT: Skradski, Shana
; TITLE OF INVENTION: MASS 1 GENE, A TARGET FOR ANTICONVULSANT DRUG DEVELOPMENT
; FILE REFERENCE: 1321.2.53
; CURRENT APPLICATION NUMBER: US/10/423,483
; CURRENT FILING DATE: 2003-04-25
; PRIOR APPLICATION NUMBER: US/10/220,587
; PRIOR FILING DATE: 2002-12-02

```
; PRIOR APPLICATION NUMBER: US 60/187,209
; PRIOR FILING DATE: 2000-03-03
; PRIOR APPLICATION NUMBER: US 60/222,898
; PRIOR FILING DATE: 2000-07-03
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 2780
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-423-483-2

Query Match      8.0%; Score 85.5; DB 12; Length 2780;
Best Local Similarity 21.4%; Pred. No. 70;
Matches 41; Conservative 32; Mismatches 78; Indels 41; Gaps 8;

QY 26 TEINKAIDDAIAIEQSETIDPMKVPDHADKFERHY-----GIVDFKGLAMRNIEA 78
DB 2508 TVTVNLANDNVAGIVGFQTSRSRVIGHEGEMLOFHVVRTPPGRGNTVNVKVVQGNLEV 2567
QY 79 RGLQMKRQGDANKVGE-----EGIVKAHLIGVHDDIVSME-----YDLAYKGLDGLH 126
DB 2568 -----NFANTGQLFSEGTINKTI FVHLDDNIPKEVYQVLYDV--KTQGV 2616
QY 127 PTHVISDIOFVVALSLEISDEG-----NITMTS--FEVROFANVV-----NHIGLSIL 175
DB 2617 PAGVALLDAQGYAAVLTVASDEPHGVNLPALSRFVVLQEVANVTIQLFVNREFGSLGAI 2676
QY 176 DPFGVLSDLT 187
DB 2677 NVTATVPGIVS 2688

RESULT 42
US-10-587-2
; Sequence 2, Application US/10220587
; Publication No. US20030208782A1
; GENERAL INFORMATION:
; APPLICANT: Placek, Louis
; APPLICANT: White, H. Steve
; APPLICANT: Fu, Ying-Hui
; APPLICANT: Skradski, Shana
; TITLE OF INVENTION: MASS 1 GENE, A TARGET FOR ANTICONVULSANT DRUG DEVELOPMENT
; FILE REFERENCE: 1321.2.53
; CURRENT FILING DATE: 2002-12-02
; PRIOR APPLICATION NUMBER: US 60/187,209
; PRIOR FILING DATE: 2000-03-03
; PRIOR APPLICATION NUMBER: US 60/222,898
; PRIOR FILING DATE: 2000-07-03
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
; LENGTH: 2780
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-220-587-2

Query Match      8.0%; Score 85.5; DB 15; Length 2780;
Best Local Similarity 21.4%; Pred. No. 70;
Matches 41; Conservative 32; Mismatches 78; Indels 41; Gaps 8;

QY 26 TEINKAIDDAIAIEQSETIDPMKVPDHADKFERHY-----GIVDFKGLAMRNIEA 78
DB 2508 TVTVNLANDNVAGIVGFQTSRSRVIGHEGEMLOFHVVRTPPGRGNTVNVKVVQGNLEV 2567
QY 79 RGLQMKRQGDANKVGE-----EGIVKAHLIGVHDDIVSME-----YDLAYKGLDGLH 126
DB 2568 -----NFANTGQLFSEGTINKTI FVHLDDNIPKEVYQVLYDV--KTQGV 2616
QY 127 PTHVISDIOFVVALSLEISDEG-----NITMTS--FEVROFANVV-----NHIGLSIL 175
DB 2617 PAGVALLDAQGYAAVLTVASDEPHGVNLPALSRFVVLQEVANVTIQLFVNREFGSLGAI 2676
QY 176 DPFGVLSDLT 187
DB 2677 NVTATVPGIVS 2688

US-10-369-493-18437
; Sequence 18437, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 18437
; LENGTH: 878
; TYPE: PRT
; ORGANISM: Lactococcus lactis
US-10-369-493-18437

Query Match      8.0%; Score 85; DB 15; Length 878;
Best Local Similarity 24.7%; Pred. No. 15;
Matches 39; Conservative 33; Mismatches 44; Indels 42; Gaps 8;

QY 72 AMRNEARGLQMKRQGDANKVGEIVKA-HLIGVHDDIVSMEYDLAYKGLDGLHPTTH 130
DB 106 ALRQMSAPSAKVL-----NGEKTSIPARELVVG---DIVSLE-----AGDFIPADG 149
QY 131 VISDIOFVVALSLEISDEGNITMTSFEVROFANVV-----NHIGLSILDIFG 180
DB 150 RLIDVQNLRV-----EEGMLTGESEFEVKFSDVIEGVALGDRKNVFFSSIV--VYG 200
QY 181 VLSDLVTATFOOTVRKEMTKVLAPA-----FKRELEK 212
DB 201 RADFLVTATIAEQTEIGKIAQMLETAEAQOTPLQOKLEK 238

RESULT 44
US-10-369-493-7986
; Sequence 7986, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 7986
; LENGTH: 380
; TYPE: PRT
; ORGANISM: Rhodobacter sphaeroides
US-10-369-493-7986

Query Match      7.9%; Score 84.5; DB 15; Length 380;
Best Local Similarity 21.7%; Pred. No. 5.1;
```

Matches 47; Conservative 26; Mismatches 77; Indels 67; Gaps 8;
QY 8 AAVAFVAVSADPIHYDKITEEINKAIDDAIAAEQSEITDPMKVPDHDADKFERHVGIVDF 67
Db 31 AEARFETGADFEIYARYGNPTFRPEERIAAVEGTE-----DAFATASGMAAI 79
QY 68 KGEAMRNIEARGLKQMKRQGDANVKGEIGVKAHLIGVHDDIVSMYDLAYKGLDHP 127
Db 80 HGVLT-----SIVRAGD-----HLVAARALFG-----SCIYILBEVLGRGV 116
QY 128 TTHVI--SDIQPFVVAL-----SLEISDEGNITMTSFEVRQFANVNHIG 170
Db 117 EVTFVDGTDLDQWRAAVREGTKAVPFESVSNPTLEVADIGAI-----AEIAHVG 166
QY 171 GLSILDPIRGVLSVLTAFQDVTVRKMTKVLAPAFK 207
Db 167 ALVIVDNVFA-----TPVFSTAVRQGDVVIYSATK 197

RESULT 45
US-10-282-122A-71072
; Sequence 71072, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.0344
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2000-03-21
; PRIOR FILING DATE: 2000-03-21
; PRIOR FILING DATE: 2000-05-23
; PRIOR FILING DATE: 2000-05-26
; PRIOR FILING DATE: 2000-05-26
; PRIOR FILING DATE: 2000-09-06
; PRIOR FILING DATE: 2000-09-09
; PRIOR FILING DATE: 2000-10-23
; PRIOR FILING DATE: 2000-10-23
; PRIOR FILING DATE: 2000-11-27
; PRIOR FILING DATE: 2000-12-22
; PRIOR FILING DATE: 2001-02-09
; PRIOR FILING DATE: 2001-02-16
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 71072
; LENGTH: 817
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-282-122A-71072

Query Match 7.9%; Score 84.5; DB 12; Length 817;
Best Local Similarity 23.0%; Pred. No. 15;
Matches 50; Conservative 35; Mismatches 87; Indels 45; Gaps 11;

QY 18 DPH-----YDKITEEINKAIDDAIAAEQSEITDPMKVPDHDADKFERHVGIVDFKELA 72
Db 504 DTLHKRVIGQNDVANSISKAVRRARGLK-----DP-----KRPICGFIPLGPTG 548
QY 73 MRNIE-ARGL-KQMKRQGDANVKGE-EGIVKAHL-----LIGV-----HDDIVSMEYDLAY 120
Db 549 VGTETARALAESFGEDDAMIRVDMSEFMEKKAVALGAPPGVYGHDDGGGLTEKVR 608
QY 121 KGLDHPHTTHVISD-----IQDFVVALSLEISDEGNITMTSFEVRQFANV-----NHIGGL 172
Db 609 K-----FYSVILFDEIEKAHPDVFNNILLQVLDGHLTDTKGRTVDFRNTVIIMTSNVGAQ 663
QY 173 SILDPIRGVLSVLTAFQDVTVRKMTKVLAPAFK 209
Db 664 ELQDRFAGFGAGSEGSDDYETVRKTMKLNKNSFRPE 700

RESULT 46
US-10-424-599-160426
; Sequence 160426, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 160426
; LENGTH: 281
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_115883C.1.pep
US-10-424-599-160426

Query Match 7.8%; Score 93.5; DB 12; Length 281;
Best Local Similarity 22.8%; Pred. No. 4.2;
Matches 51; Conservative 36; Mismatches 74; Indels 63; Gaps 12;
QY 16 SADPIHYDKITEEINKAIDDAIAAEQSEITDPMKVPDHDADKFERHVGI-VDFKELAMR 74
Db 54 SOSPELMKTDIVNM-----QLKNLRNRYLPTNATLVNIFNIGHFEGKV--- 100
QY 75 NIEARGLKQMKRQGDANVKGEIGV-----AHLIG-VHD-----DIVSMEYDLA 119
Db 101 -----GDININGKNYSILKQLHWSPEHMANGRHDAELHVLHLEDNYNIA 147
QY 120 -----YKLGDLHPHTTHVISDQDFVALSLEI-----SDRGNITMTSFEV-----RQFANV 167
Db 148 VVAVLYKLGDDPD-----LISQFEDKLVLEKEIRAGNKDAQIAIGTFDVEEINRSHRYR 204
QY 168 HIGGLSILDPIRGVLSVLTAFQDVTVRKMTKV-----LAPAFK 207
Db 205 YVGSLLTPPKREGVTWNILGKL--RTLSKKQLELLKAPLGPEFK 246

RESULT 47
US-10-408-765A-1398
; Sequence 1398, Application US/10408765A
; Publication No. US20040101874A1
; GENERAL INFORMATION:
; APPLICANT: Ghosh, Soumitra S.
; APPLICANT: Fahy, Eoin D.
; APPLICANT: Zhang, Bing
; APPLICANT: Gibson, Bradford W.
; APPLICANT: Taylor, Steven W.
; APPLICANT: Glenn, Gary M.
; APPLICANT: Warnock, Dale E.

```

; TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
; FILE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
; FILE REFERENCE: 660088.465
; CURRENT APPLICATION NUMBER: US/10/408,765A
; CURRENT FILING DATE: 2003-04-04
; NUMBER OF SEQ ID NOS: 3077
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1398
; LENGTH: 360
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-408-765A-1398

Query Match
Best Local Similarity 7.8%; Score 83.5; DB 16; Length 360;
Matches 31; Conservative 29; Mismatches 66; Indels 17; Gaps 4;

QY 21 HYDKITEINKALDAIAIEQSETIDPMKVPDHDYFPERHVGIVDPKGLAMNIEAR- 79
DB 3 HLGKTIKLEKQEMADIVASRTSTLEQNDYKKNRRE--LAEMQRLKKTLEAEK 60
QY 80 -GLKMKRQGDANVKGE-----EGIVKAHLIGVHDDIVSMYEDLAYKGLDLHPT 128
DB 61 SRLTAMKQDEMRLMEELRDYQRAQDEALTKRQL---EQLKDLLEYLEAKSHLKDDR 117
QY 129 THVISDIOQFVVALSLEISDEGN 151
DB 118 SRLVKQMEDRVQSLEMELEERN 140

RESULT 48
US-10-437-963-168034
; Sequence 168034, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated with
; FILE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 168034
; LENGTH: 405
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_66589C.1.pep
US-10-437-963-168034

Query Match
Best Local Similarity 7.8%; Score 83.5; DB 16; Length 405;
Matches 64; Conservative 35; Mismatches 82; Indels 77; Gaps 14;

QY 7 IAAVAFVAGADPT-----HYDKITEINKALDAIAIEQ-SETIDPMK-VFDHAD-- 56
DB 126 VAVASALAAATSVPSLVLARGHRIETVPELPLVISDSAESIEKTSQAIKLKQVGVADAE 185
QY 57 KFERHVGIVDPKGLAMNIEARGLKQKQGDANVKGE--IVKA-HLLIGVHDDIVS 113
DB 186 KAKDSVIGRCKGM-----RNRVINKKGLPIVIGEGSKIVAFRNLPGV--DVAN 236
QY 114 MEYDLAYKGLDLHPTTHV-----ISDIQDFVVALSLE-----ISD 148
DB 237 VE---RLNLLDAPGGHGLRFRVIWTESAFKLEEVYGTFEAPSLKKKGLTLPKPMANAD 293

; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

149 EGNITWTSFEVRQFA-----NVVNHIGGLSILDPIRGVLSDVLTAIPQDTV 194
DB 294 LGRI-INSDEVOSVVKPLNKEVKRKRKNPLKNAVAALVKLNYPFG-----TA 340
QY 195 RKEMTKVLAPAFKRELEK 212
DB 341 RKMATLAEEAARIKARKEK 358

RESULT 49
US-09-738-626-3526
; Sequence 3526, Application US/09738626
; Publication No. US20020197605A1
; GENERAL INFORMATION:
; APPLICANT: NAKAGAWA, SATOSHI
; APPLICANT: MIZOGUCHI, HIROSHI
; APPLICANT: ANDO, SEIKO
; APPLICANT: HAYASHI, MIKIRO
; APPLICANT: OCHIAI, KEIKO
; APPLICANT: YOKOI, HARUHIKO
; APPLICANT: TATEISHI, NAOKO
; APPLICANT: SENOH, AKIHIRO
; APPLICANT: IKEDA, MASATO
; APPLICANT: OZAKI, AKIO
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
; FILE REFERENCE: 249-125
; CURRENT APPLICATION NUMBER: US/09/738,626
; CURRENT FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: JP 99/377484
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: JP 00/159162
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: JP 00/280988
; PRIOR FILING DATE: 2000-08-03
; NUMBER OF SEQ ID NOS: 7059
; SOFTWARE: PatentIn ver. 3.0
; SEQ ID NO 3526
; LENGTH: 412
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-09-738-626-3526

Query Match
Best Local Similarity 7.8%; Score 83.5; DB 9; Length 412;
Matches 34; Conservative 16; Mismatches 41; Indels 17; Gaps 6;

QY 54 HADKFERHVGIVDPKGLAMNIEARGLKQKQGDANVKGEIGIVKAHLIGVHDDIVS 113
DB 134 YAAEPE---IQPFSGEDSFVTLKGSDFKDALEQ-----QWEGSARFVAALGVSDN-VS 183
QY 114 MEYDLAYKGLDLHPTTHVISDI-----QDFVVALSLEISDEGNITMVS 156
DB 184 YTIIDINREIFGD-RVTSVTIDTDLDPDRDYVVAASLYL-QSGNEGMTA 229

RESULT 50
US-10-282-122A-78505
; Sequence 78505, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
```

```

; LENGTH: 775
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_12903C.1.pep
US-10-437-963-108671

Query Match          7.8%; Score 83.5; DB 16; Length 775;
Best Local Similarity 22.4%; Pred. No. 18;
Matches 48; Conservative 48; Mismatches 73; Indels 45; Gaps 12;

QY 20 IHYDKITBEINKAIDATAAI-----EOSTIDPMKVPDHA--DKFERHVGIVDFKG 69
DB 275 LNSESVVOEMAEVRDELVDKVMNLELKPQSAQIKLKEDNLSKORLD-----DLQD 328
QY 70 ELAMENIARGLKQMKROGDA--NVKG--EEGIVKAHLIG-VHDDIVSMEYDLAYKLGDL 125
DB 329 EIALRDDPSLSEQKLADELARVKALERSVIEEVLSTVPFSEVSCITNISKATGSI 388
QY 126 HPTHTVISDIQFVVVALSLEISDEGNIT-----MTSFVRQFQFANVNVHIGLSILDPIFG- 180
DB 389 DP-----EDMTSLGAAVENDGEITSDISTSLPEEFDRDAPSWQEFL--LDGIEGR 437
QY 181 --VLSDLTAIFQDITVRKEMTKVLAPAFKRELEK 212
DB 438 EALLLDYTLIURN--YKETKRLA-----ELEK 464

RESULT 52
US-10-437-963-134622
; Sequence 134622, Application US/10437963
; Publication No. US20040123343AI
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 134622
; LENGTH: 551
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_36378C.1.pep
US-10-437-963-134622

Query Match          7.8%; Score 83; DB 16; Length 551;
Best Local Similarity 23.1%; Pred. No. 12;
Matches 52; Conservative 25; Mismatches 78; Indels 70; Gaps 10;

QY 7 IAAVAF--VAVSADPIHYDKIT-----ESINKAIDDAIAAEOSTIDPMKVPD 53
DB 301 LAHVVFYSGSTGPEHWGSLSPNFTTCSGTGYSPINILKDDAV-----YNPLBPL 352
QY 54 HADKFERHVGIVDFKGLAMRNIEARGLKMKRQGDANVKGEIGVKAHLIGVHDDIVS 113
DB 353 EMDYTAANTIVD-----NVFNIALRYNDTAGTVKVDGKK-----387
QY 114 MEYDLAYKLGDLH---PTTHVISDIQDFVVALSL--EISDEGNITWTSFVRQFANVNH 169
DB 388 -----YKLRQLHWSPSEHTING-ORFAVELHMHVHSDGNTIVIAVLYRH-----432
QY 170 GGLSILDP1FGVLSLDVLTAFQDITVRKEMTKVLAPAF--KRELEK 212

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QY 79 RGLQKMKRQGDANVKGEGIVKAHLIGVHDDIVSMEYD 117
DB 603 -----QQAAGDASAEGK-----DDVVDADYE 624

RESULT 57
US-10-369-493-15263
; Sequence 15263, Application US/10369493
; Publication No. US20030233673A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 15263
; LENGTH: 633
; TYPE: PRT
; ORGANISM: Agrobacterium tumefaciens
US-10-369-493-15263

Query Match 7.8%; Score 83; DB 15; Length 633;
Best Local Similarity 28.3%; Pred. No. 15;
Matches 28; Conservative 16; Mismatches 27; Indels 28; Gaps 4;

QY 23 DKITEINKAIDDAIA-----AIEQSEIDPMKVPDHDADKFERHVGIVDFKGLAMRNIEA 78
DB 550 DKVSETDRKAIEDAIAASLKTAVEAEE-----PDADDIQAKTQTLMEVSMKLGQAIYEA 602
QY 79 RGLQKMKRQGDANVKGEGIVKAHLIGVHDDIVSMEYD 117
DB 603 -----QQAAGDASAEGK-----DDVVDADYE 624

RESULT 58
US-10-389-566-1416
; Sequence 1416, Application US/10389566
; Publication No. US20040025202A1
; GENERAL INFORMATION:
; APPLICANT: Monsanto Technology, LLC
; APPLICANT: Laurie, Cathy C
; TITLE OF INVENTION: Nucleic Acid Molecules Associated with Oil in Plants
; FILE REFERENCE: 38-77(52900)D
; CURRENT APPLICATION NUMBER: US/10/389,566
; CURRENT FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: US 60/365,301
; PRIOR FILING DATE: 2002-03-15
; PRIOR APPLICATION NUMBER: US 60/391,786
; PRIOR FILING DATE: 2002-06-25
; PRIOR APPLICATION NUMBER: US 60/392,018
; PRIOR FILING DATE: 2002-06-26
; NUMBER OF SEQ ID NOS: 2459
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 1416
; LENGTH: 633
; TYPE: PRT
; ORGANISM: Agrobacterium tumefaciens
US-10-389-566-1416

Query Match 7.8%; Score 83; DB 16; Length 633;
Best Local Similarity 28.3%; Pred. No. 15;
Matches 28; Conservative 16; Mismatches 27; Indels 28; Gaps 4;

QY 23 DKITEINKAIDDAIA-----AIEQSEIDPMKVPDHDADKFERHVGIVDFKGLAMRNIEA 78
DB 550 DKVSETDRKAIEDAIAASLKTAVEAEE-----PDADDIQAKTQTLMEVSMKLGQAIYEA 602

DB 550 DKVSETDRKAIEDAIAASLKTAVEAEE-----PDADDIQAKTQTLMEVSMKLGQAIYEA 602
QY 79 RGLQKMKRQGDANVKGEGIVKAHLIGVHDDIVSMEYD 117
DB 603 -----QQAAGDASAEGK-----DDVVDADYE 624

RESULT 59
US-10-389-566-1559
; Sequence 1559, Application US/10389566
; Publication No. US20040025202A1
; GENERAL INFORMATION:
; APPLICANT: Monsanto Technology, LLC
; APPLICANT: Laurie, Cathy C
; TITLE OF INVENTION: Nucleic Acid Molecules Associated with Oil in Plants
; FILE REFERENCE: 38-77(52900)D
; CURRENT APPLICATION NUMBER: US/10/389,566
; CURRENT FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: US 60/365,301
; PRIOR FILING DATE: 2002-03-15
; PRIOR APPLICATION NUMBER: US 60/391,786
; PRIOR FILING DATE: 2002-06-25
; PRIOR APPLICATION NUMBER: US 60/392,018
; PRIOR FILING DATE: 2002-06-26
; NUMBER OF SEQ ID NOS: 2459
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 1559
; LENGTH: 633
; TYPE: PRT
; ORGANISM: Agrobacterium tumefaciens
US-10-389-566-1559

Query Match 7.8%; Score 83; DB 16; Length 633;
Best Local Similarity 28.3%; Pred. No. 15;
Matches 28; Conservative 16; Mismatches 27; Indels 28; Gaps 4;

QY 23 DKITEINKAIDDAIA-----AIEQSEIDPMKVPDHDADKFERHVGIVDFKGLAMRNIEA 78
DB 550 DKVSETDRKAIEDAIAASLKTAVEAEE-----PDADDIQAKTQTLMEVSMKLGQAIYEA 602
QY 79 RGLQKMKRQGDANVKGEGIVKAHLIGVHDDIVSMEYD 117
DB 603 -----QQAAGDASAEGK-----DDVVDADYE 624

RESULT 60
US-09-874-923-110
; Sequence 110, Application US/09874923
; Patent No. US20020081320A1
; GENERAL INFORMATION:
; APPLICANT: Reed, Steven G.
; APPLICANT: Campos-Neto, Antonio
; APPLICANT: Webb, John R.
; APPLICANT: Dillon, Davin C.
; APPLICANT: Skeiky, Yasir A.W.
; APPLICANT: Bhatia, Rajay
; APPLICANT: Coler, Rhea
; APPLICANT: Probst, Peter
; APPLICANT: Brannon, Mark
; TITLE OF INVENTION: LEISHMANIA ANTIGENS FOR USE IN THE
; FILE REFERENCE: 210121.420C8
; CURRENT APPLICATION NUMBER: US/09/874,923
; CURRENT FILING DATE: 2001-06-04
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 110
; LENGTH: 845
; TYPE: PRT
; ORGANISM: Leishmania major
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(845)

Db 686 WSKANDEVSKAM--MANLSKEKVID-----RHGDEVEQE-----SFNSMYWADSGARGS 733
Qy 81 ----LKQMKRQGDANVKGEEGIVKAHLIGVHDDIVSMY-----DLAYKGLDL 125
Db 734 AAQIRQLAGRMGLMAKPGDSIIETITANFREGSLVQYFISTHGARKGLADTALKTANS 793
Qy 126 HPTTHVISDIQDFVVALSLEISDEGNITWTSFEVQFANVNVHIGLSILDP1-FGVLSL 184
Db 794 GYLTRLVDVADLVVTEIDCOTEHGLMTP-----HIEGGDVVEPLGERSVLGR 842
Qy 185 VLTALFQDTRKXMTKVLA 205
Db 843 V---IARDVFKPGTEDI VPA 860

RESULT 64
US-10-116-275-244
; Sequence 244, Application US/10116275
; Publication No. US20030211476A1
; GENERAL INFORMATION:
; APPLICANT: Elan Pharmaceutical Technology
; APPLICANT: O'Mahony, Daniel J.
; APPLICANT: Brayden, David
; APPLICANT: Byrne, Daragh
; APPLICANT: Lambkin, Imelda
; APPLICANT: Higgins, Lisa
; TITLE OF INVENTION: Genetic Analysis of Peyer's Patches and M Cells and Methods and
; TITLE OF INVENTION: Compositions Targeting Peyer's Patches and M Cell Receptors
; FILE REFERENCE: E1067/20087
; CURRENT APPLICATION NUMBER: US/10/116,275
; CURRENT FILING DATE: 2002-10-04
; NUMBER OF SEQ ID NOS: 349
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 244
; LENGTH: 2339
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-116-275-244

Query Match 7.7%; Score 82.5; DB 15; Length 2339;
Best Local Similarity 24.2%; Pred. No. 1.1e+02;
Matches 39; Conservative 32; Mismatches 49; Indels 41; Gaps 7;
Qy 45 TIDPMKVPDHDADKFERHVGIVDFKGL-----AMRNIARGLKQMKRQ----- 88
Db 2091 TINPLCIEMYADK-ESRGVLEPEGTVEIKFRKEDLIKSMRRIIDPAYKLMQGLGEPDLS 2149
Qy 89 DANVKGEEGIVKAHLIGVHDDIVSMYEDLAYKGLDLHPT-----THVISDIQDFVVAL 142
Db 2150 DKDKOLEGRKAR-----EDLLPIYHQAQVAFADHDTFGRMLEKGVISDILEWKTAR 2204
Qy 143 S-----LEISDEGNITWTSFEVQFANVNVHIGLSIL 175
Db 2205 TFLYWRRLRLLEDQ-----VKQELQASGELSHVHIQSM 2240

RESULT 65
US-10-092-900A-218
; Sequence 218, Application US/10092900A
; Publication No. US20040043382A1
; GENERAL INFORMATION:
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Shenoy, Suresh G.
; APPLICANT: Taupier Jr., Raymond J.
; APPLICANT: Pena, Carol E.A.
; APPLICANT: Li, Li
; APPLICANT: Zerhusen, Bryan D.
; APPLICANT: Gusev, Vladimir Y.
; APPLICANT: Ji, Weizhen
; APPLICANT: Gorman, Linda
; APPLICANT: Miller, Charles E.
; APPLICANT: Kekuda, Ramesh

; APPLICANT: Patturajan, Meera
; APPLICANT: Gangolli, Bsha A.
; APPLICANT: Vernet, Corine A.M.
; APPLICANT: Guo, Xiaojia Sasha
; APPLICANT: Tchernev, Velizar T.
; APPLICANT: Fernandes, Elma R.
; APPLICANT: Casman, Stacie J.
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Liu, Yi
; APPLICANT: Anderson, David W.
; APPLICANT: Spaderna, Steven K.
; APPLICANT: Carterton, Elina
; APPLICANT: Leite, Mario W.
; APPLICANT: Zhong, Haihong
; APPLICANT: Alsobrook, John P.
; APPLICANT: Lepley, Denise M.
; APPLICANT: Rieger, Daniel K.
; APPLICANT: Burgess, Catherine E.
; TITLE OF INVENTION: No. US20040043382A1el Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 21402-290C
; CURRENT APPLICATION NUMBER: US/10/092,900A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: USN 60/274,322
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: USN 60/283,675
; PRIOR FILING DATE: 2001-04-13
; PRIOR APPLICATION NUMBER: USN 60/338,092
; PRIOR FILING DATE: 2001-12-03
; PRIOR APPLICATION NUMBER: USN 60/274,281
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: USN 60/274,191
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: USN 60/325,681
; PRIOR FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: USN 60/304,354
; PRIOR FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: USN 60/279,995
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: USN 60/294,899
; PRIOR FILING DATE: 2001-05-31
; PRIOR APPLICATION NUMBER: USN 60/287,424
; PRIOR FILING DATE: 2001-04-30
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SEQ ID NO 218
; LENGTH: 2496
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-092-900A-218

Query Match 7.7%; Score 82.5; DB 12; Length 2498;
Best Local Similarity 24.2%; Pred. No. 1.2e+02;
Matches 39; Conservative 32; Mismatches 49; Indels 41; Gaps 7;
Qy 45 TIDPMKVPDHDADKFERHVGIVDFKGL-----AMRNIARGLKQMKRQ----- 88
Db 2250 TINPLCIEMYADK-ESRGVLEPEGTVEIKFRKEDLIKSMRRIIDPAYKLMQGLGEPDLS 2308
Qy 89 DANVKGEEGIVKAHLIGVHDDIVSMYEDLAYKGLDLHPT-----THVISDIQDFVVAL 142
Db 2309 DKDKOLEGRKAR-----EDLLPIYHQAQVAFADHDTFGRMLEKGVISDILEWKTAR 2363
Qy 143 S-----LEISDEGNITWTSFEVQFANVNVHIGLSIL 175
Db 2364 TFLYWRRLRLLEDQ-----VKQELQASGELSHVHIQSM 2399

RESULT 66
US-10-289-762-894
; Sequence 894, Application US/10289762
; Publication No. US20040006218A1
; GENERAL INFORMATION:

APPLICANT: Griffais, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments thereof and uses thereof, in particular for the diagnosis, prevention and treatment of infection
FILE REFERENCE: 9710-003-999
CURRENT APPLICATION NUMBER: US/10/289,762
CURRENT FILING DATE: 2003-03-27
NUMBER OF SEQ ID NOS: 6849
SEQ ID NO 894
LENGTH: 397
TYPE: PRT
ORGANISM: Chlamydia pneumoniae
US-10-289-762-894

Query Match
Best Local Similarity 20.4%; Score 82; DB 15; Length 397;
Matches 46; Conservative 44; Mismatches 69; Indels 66; Gaps 11;
QY 23 DKITEE-----INKAIDDAIAAIEQSETIDPMKVPDHDADKFE-----RH 61
DB 155 NKFTKQIGIRILTKA---SISAIEESQNVRTVNDQVEEFDYVLVAIGRQFNTASIGLDN 211
QY 62 VGIV-DFKGLAMENIEARGLKQMKROG-----ANKGEGEIVKAHLIGVHDDIVS 113
DB 212 AGVIRDRGVIPVDETMTNVPNIYAIGDITGKWLHARVASHQGVIAAKNISGHHE---V 268
QY 114 MEYDLAYKGLDHPHTTHVISDIOFVVALSLEISDEGNI--TWTSFEVRQ----- 161
DB 269 MDYSAIPSVIFTHP-----ETAMVGLSLQEAQQNLPAKLTFFPKFAIGKAVALGAS 320
QY 162 --FANVNH-----IGGLSILDPFGVLSVLTALFQDVTVRKEMT 199
DB 321 DGFAAIVSHEITQOILGAYVIGHASSLIGEMTL-----AIRNELT 361

RESULT 67
US-09-841-132-399
Sequence 399, Application US/09841132
Patent No. US20020061848A1
GENERAL INFORMATION:
APPLICANT: Bhatia, Ajay
APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Probst, Peter
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT AND DIAGNOSIS OF CHLAMYDIAL INFECTION
FILE REFERENCE: 210121.469C8
CURRENT APPLICATION NUMBER: US/09/841.132
CURRENT FILING DATE: 2001-04-23
NUMBER OF SEQ ID NOS: 599
SOFTWARE: FastSeq for Windows Version 3.0/4.0
SEQ ID NO 399
LENGTH: 461
TYPE: PRT
ORGANISM: Chlamydia pneumoniae
US-09-841-132-399

Query Match
Best Local Similarity 20.4%; Score 82; DB 9; Length 461;
Matches 46; Conservative 44; Mismatches 69; Indels 66; Gaps 11;
QY 23 DKITEE-----INKAIDDAIAAIEQSETIDPMKVPDHDADKFE-----RH 61
DB 219 NKFTKQIGIRILTKA---SISAIEESQNVRTVNDQVEEFDYVLVAIGRQFNTASIGLDN 275
QY 62 VGIV-DFKGLAMENIEARGLKQMKROG-----ANKGEGEIVKAHLIGVHDDIVS 113
DB 276 AGVIRDRGVIPVDETMTNVPNIYAIGDITGKWLHARVASHQGVIAAKNISGHHE---V 332
QY 114 MEYDLAYKGLDHPHTTHVISDIOFVVALSLEISDEGNI--TWTSFEVRQ----- 161
DB 333 MDYSAIPSVIFTHP-----ETAMVGLSLQEAQQNLPAKLTFFPKFAIGKAVALGAS 384
QY 162 --FANVNH-----IGGLSILDPFGVLSVLTALFQDVTVRKEMT 199

Db 385 DGFAAIVSHEITQOILGAYVIGHASSLIGEMTL-----AIRNELT 425
RESULT 68
US-10-282-122A-54983
Sequence 54983, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangseu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-03
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 54983
LENGTH: 461
TYPE: PRT
ORGANISM: Chlamydia pneumoniae
US-10-282-122A-54983

Query Match
Best Local Similarity 20.4%; Score 82; DB 12; Length 461;
Matches 46; Conservative 44; Mismatches 69; Indels 66; Gaps 11;
QY 23 DKITEE-----INKAIDDAIAAIEQSETIDPMKVPDHDADKFE-----RH 61
DB 219 NKFTKQIGIRILTKA---SISAIEESQNVRTVNDQVEEFDYVLVAIGRQFNTASIGLDN 275
QY 62 VGIV-DFKGLAMENIEARGLKQMKROG-----ANKGEGEIVKAHLIGVHDDIVS 113
DB 276 AGVIRDRGVIPVDETMTNVPNIYAIGDITGKWLHARVASHQGVIAAKNISGHHE---V 332
QY 114 MEYDLAYKGLDHPHTTHVISDIOFVVALSLEISDEGNI--TWTSFEVRQ----- 161
DB 333 MDYSAIPSVIFTHP-----ETAMVGLSLQEAQQNLPAKLTFFPKFAIGKAVALGAS 384
QY 162 --FANVNH-----IGGLSILDPFGVLSVLTALFQDVTVRKEMT 199
DB 385 DGFAAIVSHEITQOILGAYVIGHASSLIGEMTL-----AIRNELT 425


```
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/046,649
; FILING DATE: 14-Jan-2002
; CLASSIFICATION: 435
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/336,251
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/073,381
; FILING DATE: 04-JUN-1993
; APPLICATION NUMBER: US 07/804,632
; FILING DATE: 09-DEC-1991
; APPLICATION NUMBER: US 07/366,581
; FILING DATE: 15-JUN-1989
; APPLICATION NUMBER: US 07/207,298
; FILING DATE: 15-JUN-1988
; APPLICATION NUMBER: PCT/US89/02619
; FILING DATE: 15-JUN-1989
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: WH188-08AFA3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 861-6240
;
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 547 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-046-649-2

Query Match
Best Local Similarity 7.6%; Score 81.5; DB 14; Length 547;
Matches 48; Conservative 37; Mismatches 85; Indels 65; Gaps 10;

QY 13 VAVSADPTHYDKITEINKAIDDAI-AAEQSETIDPMKVPDHADKPERHVGIVDFRGEL 71
Db 107 VAGNPM-----DLRGIDKAVTAABE---LKALSVPCSDSKAIAQVGTISANSDE 156
QY 72 AMRNTEARGLQMKRQGDANVKGEIGVKAHLIGVHDD---IVSMEYDLYAYKLGDL--H 126
Db 157 TVGKLIAEAMDKV-----GREGVITVEDGTGLQDELVDVVEGMQDFRGYLSPYFINK 207
QY 127 PTHVISIDQFVVALSLEISD-----EGNITMTSFEVRQ 161
Db 208 PETGAVELESFILLADKKISNIREMLEVLEAVAKAGKPLIIIAEDVEGALATA----- 262
QY 162 FANVVNHVHIGL-----SILDPIFGVLSVLTAFQDVTVRKEMTKVLAFAFKRELEK 212
Db 263 ---VVTIRGIVKVAAPGPGF---DRRKAMLDQIATLTGGTVISBEIGMELEK 311

RESULT 72
US-10-369-493-2657
; Sequence 2657, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
```

```
;
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 2657
; LENGTH: 745
; TYPE: PRT
; ORGANISM: Synechocystis sp.
; US-10-369-493-2657

Query Match
Best Local Similarity 7.6%; Score 81.5; DB 15; Length 745;
Matches 30; Conservative 26; Mismatches 46; Indels 17; Gaps 5;

QY 77 EAGLAKMKRQGDANVKGEIGVKAHLI-----IGVHDDIVSMEYDLYAYKLGDLHPTTHVI 132
Db 614 KAOQVEQLQOKGNIVAMVGGDINDAPALQAQADVGI---AIGTGVDAIAASDI---TLIA 667
QY 133 SDIQDFVVALSLEISDEGNITMTSFEVRQFANVNHIG---GLSILDPIFGVLSVLT 188
Db 668 GDLQGLITAIKLSRATMGNIRQNLF---FAFIYNVIGIPVAAGLFYPLFGLLNPILA 722

RESULT 73
US-10-282-122A-52455
; Sequence 52455, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangau
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELIPRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 52455
; LENGTH: 1279
; TYPE: PRT
; ORGANISM: Clostridium botulinum
; US-10-282-122A-52455

Query Match
Best Local Similarity 7.6%; Score 81.5; DB 12; Length 1279;
```

```
Best Local Similarity 23.0%; Pred. No. 60;
Matches 40; Conservative 26; Mismatches 47; Indels 61; Gaps 8;

QY 23 DKITEINKAIDDAIAISQSETIDPMKVPDHDKPFERHVGIVDFKGLAME-----74
Db 1132 EDIKQINLIEREFITYEQSKVINYKIL-----KPCR-----GELGKILNSNNVN 1179
QY 75 -----NIEARGLKQKROGDANVKGEIGVKAHLIGV-----HDDIVSMEYDLAYKL 122
Db 1180 KEMFSEIETPAIEIYKELDKBIYKDEKLIIQ-----GVDCVPEBEDGLVLLDYKTDY-- 1232
QY 123 GDLHPHTHVISDQDFVWALSLEISDEGNITMTSFVROFANVNVNHIGLSILD 176
Db 1233 -----VNDIE-----EIKRYEI-----QIKYEEALNRITCKVKVD 1264

RESULT 74
US-10-424-599-197313
; Sequence 197313, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 197313
; LENGTH: 222
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_201C.1.pap
US-10-424-599-197313

Query Match 7.6%; Score 81; DB 12; Length 222;
Best Local Similarity 25.9%; Pred. No. 5.5;
Matches 50; Conservative 31; Mismatches 70; Indels 42; Gaps 12;

QY 17 ADPIHVDKITEINKAID-DAIAISQ-----ETIDPMKVPDHDKPFERHVGIVDFKGL 71
Db 35 AKPRHEAKVVD-----VDLSLEAIEKSSQSAVEALDLRAKGVLSFERRL-----80
QY 72 AMRNIARGLK--QMKROGDANVKGEIGVKAHLIGV---HDDIVSMEYDLAYKLGDL 125
Db 81 -KENIAR-LKYPNQDPDFADSEVELHEELQKLVASAPFYPDIVSL--NVVPSIVDL 136
QY 126 --HPTTHVISDI---QDFVWALSLEISDEGNITMTSFVROFANVNVNHIGLSILD 177
Db 137 LNHDTDAIDVWQLQDLTNEVDLDNDDSARVLVDALVENSALIELLVQNLRLNDSDP 196
QY 178 -----IFGVLSDV 185
Db 197 DKNAAVYGTLATV 209

RESULT 75
US-10-424-599-239257
; Sequence 239257, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
```

```
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 239257
; LENGTH: 296
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(296)
; OTHER INFORMATION: unsure at all Xaa locations
; OTHER INFORMATION: Clone ID: PAT_MRT3847_58074C.1.pap
US-10-424-599-239257
```

Query Match 7.6%; Score 81; DB 12; Length 296;

Best Local Similarity 21.6%; Pred. No. 8.3;
Matches 44; Conservative 37; Mismatches 69; Indels 54; Gaps 9;

```
QY 41 EQSETIDPMKVPDHDKPF--ERHVGIVDFKGLAMRNIARGLKQKROGDANVKGEIGI 98
Db 79 EAENIIDNMHV--KPKDFLWASLLGGCRIHGNLEAKRAKALYEISPENPTY-----I 131
QY 99 VKAHL--IGVHDDIVSMEYDL-----AYKLGDLHPHTTHVISDI 135
Db 132 TLANIYANAGLWSEVANVRKMDNNGIVKPKGSWIEIKROHVFVLVDTSPPK--TSDI 189
QY 136 QDFVWALSLEISDEGNITMTSF-----EVRQFANVNVNHIGLSILDPIFGVLS----- 183
Db 190 HEFLGELSKKIKESGYVPTNFVLHVDVEEQEQLNVVHSEKLV---AFGIISTPPGTP 246
QY 184 -----DVLTAIFQDPTVRKEMTKVL 202
Db 247 IKVFNKLTCTVDCHTAIKYISKIV 270
```

RESULT 76

```
US-09-991-138-12
; Sequence 12, Application US/09991138
; Publication No. US20030040091A1
; GENERAL INFORMATION:
; APPLICANT: Trimbur, Donald E.
; APPLICANT: Whited, Gregory M.
; APPLICANT: Selfenova, Olga V.
; TITLE OF INVENTION: Mutant 1,3-Propanediol Dehydrogenase
; FILE REFERENCE: GC860-2D1
; CURRENT APPLICATION NUMBER: US/09/991,138
; CURRENT FILING DATE: 2001-11-16
; PRIOR APPLICATION NUMBER: US 09/570,778
; PRIOR FILING DATE: 2000-05-14
; PRIOR APPLICATION NUMBER: US 60/134,868
; PRIOR FILING DATE: 1999-05-19
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 385
; TYPE: PRT
; ORGANISM: Clostridium pasteurianum
US-09-991-138-12
```

Query Match 7.6%; Score 81; DB 10; Length 385;

Best Local Similarity 23.8%; Pred. No. 12;
Matches 48; Conservative 39; Mismatches 71; Indels 44; Gaps 10;

```
QY 2 MKFLIIAAVAFVAVSA-DPIHYDKITEINKA--IDDAIAAIEQSEITIDPMKVPDHDKPF 58
Db 161 IKFVIVSWNLPLVSIINDPILMKPKAGLTATGMDALTHAIESVSKDANPVD----- 215
QY 59 ERHVGIVDFKGLAMRNI--ARGLKQKROGDANVKGEIGVKAHLIGVHDDIVSMEY 116
Db 216 -----ALATQAIKLIANNLRQAVLGE-NLEARENNAVASLLAGMAFNANILGY 263
QY 117 --DLAYKLGDLHPHTTHVISDQDFVWALSLEISDEGNITMTSFVROFANVNVNHIG---- 170
```

Db 264 VMAVHQLGGLYMAHGVAN-----AMLLPHVRYNLISNP-----KKFADIAEPFGENIE 314

QY 171 GLSI-----LDPIFGVLSDV 185

Db 315 GLSVNEAREKALDANFRLSKDV 336

RESULT 77

US-10-369-493-10081

; Sequence 10081, Application US/10369493

; Publication No. US20030233675A1

; GENERAL INFORMATION:

; APPLICANT: Cao, Yongwei

; APPLICANT: Hinkle, Gregory J.

; APPLICANT: Slater, Steven C.

; APPLICANT: Goldman, Barry S.

; APPLICANT: Chen, Xianfeng

; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF

; FILE REFERENCE: 38-10(52052)B

; CURRENT APPLICATION NUMBER: US/10/369,493

; PRIOR FILING DATE: 2003-02-28

; PRIOR APPLICATION NUMBER: US 60/360,039

; PRIOR FILING DATE: 2002-02-21

; NUMBER OF SEQ ID NOS: 47374

; SEQ ID NO 10081

; LENGTH: 442

; TYPE: PRT

; ORGANISM: magnetite-containing magnetic coccus

US-10-369-493-10081

Query Match 7.6%; Score 81; DB 15; Length 442;

Best Local Similarity 21.9%; Pred. No. 15;

Matches 39; Conservative 33; Mismatches 50; Indels 56; Gaps 8;

QY 49 MKVPDHADKFERHVGIVDFKGE-----LAMRNIEARGLKMQRQGDANVKGEGIV 99

Db 88 LNAPNLPKQHYLSISQKAGDTLGLINDILSLKIEA-----GELHLE----- 132

QY 100 KAHLLIGVHDD--IVSNEYDLAYKLG-----DLPHTHVISDIQDF-----VVALS 143

Db 133 --HTLFAHLDELKSLTLMRLPMDKGLSMQCVDPOLPHVHGDPQRFQIVLNLLSNA 190

QY 144 LEISDEGNITMTSFEVR-----QFANVNVHIGGLSDIPFGVLSDLVLTAFQDVTVRKE 197

Db 191 LKFTDQGSITLHAKPIETGRLOF-----TVSDTGIQMPQEVITKIFRPFVQAE 238

RESULT 78

US-10-282-122A-48944

; Sequence 48944, Application US/10282122A

; Publication No. US20040029129A1

; GENERAL INFORMATION:

; APPLICANT: Wang, Liangsu

; APPLICANT: Zamudio, Carlos

; APPLICANT: Malone, Cheryl

; APPLICANT: Haselbeck, Robert

; APPLICANT: Ohlsen, Kari

; APPLICANT: Zyskind, Judith

; APPLICANT: Wall, Daniel

; APPLICANT: Trawick, John

; APPLICANT: Carr, Grant

; APPLICANT: Yamamoto, Robert

; APPLICANT: Forsyth, R.

; APPLICANT: Xu, H.

; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

; FILE REFERENCE: ELITRA.034A

; CURRENT APPLICATION NUMBER: US/10/282,122A

; PRIOR FILING DATE: 2003-02-20

; PRIOR APPLICATION NUMBER: 60/191,078

; PRIOR FILING DATE: 2000-03-21

; PRIOR APPLICATION NUMBER: 60/206,848

; PRIOR FILING DATE: 2000-05-23

; PRIOR APPLICATION NUMBER: 60/207,727

; PRIOR FILING DATE: 2000-05-26

; PRIOR APPLICATION NUMBER: 60/230,335

; PRIOR FILING DATE: 2000-09-06

; PRIOR APPLICATION NUMBER: 60/230,347

; PRIOR FILING DATE: 2000-09-09

; PRIOR APPLICATION NUMBER: 60/242,578

; PRIOR FILING DATE: 2000-10-23

; PRIOR APPLICATION NUMBER: 60/253,625

; PRIOR FILING DATE: 2000-11-27

; PRIOR APPLICATION NUMBER: 60/257,931

; PRIOR FILING DATE: 2000-12-22

; PRIOR APPLICATION NUMBER: 60/267,636

; PRIOR FILING DATE: 2001-03-09

; PRIOR APPLICATION NUMBER: 60/269,308

; PRIOR FILING DATE: 2001-02-16

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 78614

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 48944

; LENGTH: 545

; TYPE: PRT

; ORGANISM: Bacteroides fragilis

US-10-282-122A-48944

Query Match 7.6%; Score 81; DB 12; Length 545;

Best Local Similarity 20.3%; Pred. No. 20;

Matches 43; Conservative 33; Mismatches 82; Indels 54; Gaps 7;

QY 13 VAVSADPHYDKITEINKAIDDAIAIEQSETIDPMKVPDHADKFERHVGIVDFKGLA 72

Db 106 VTGASPM-----DIKGDIDKAVKVVDISKQAQKVGNYDKIEQ--VATVSANNDPV 157

QY 73 MNIEARGLKMQRQGDANVKGEGIVKAHLIGVHDDIVSMEYDLAYKGLDLHPTTH-- 130

Db 158 ICKLIADAMRKVKDGVITIEEAKG---TDTTIGV---VEGQDFRGVLSAYFVTNTEKM 211

QY 131 -----VISDIQDFVVALSLEISDEGNITWTSFEVQFANVNVHIGLSILD 176

Db 212 ECEMEKPIIYDKKISNEKDFLPLEPAVQ-----SGRPILV 249

QY 177 PIFGVLSDVLTAFQDVTVRKEM--TKVLAPAF 206

Db 250 IAEDVDSEALITLVNRLRSQKICAVKAPGF 281

RESULT 79

US-10-221-625-23

; Sequence 23, Application US/10221625

; Publication No. US20040033942A1

; GENERAL INFORMATION:

; APPLICANT: INCYTE GENOMICS, INC.

; APPLICANT: HILLMAN, Jennifer L.

; APPLICANT: BAUGHN, Mariah R.

; APPLICANT: YUE, Henry

; APPLICANT: LAL, Preeti

; APPLICANT: LU, Dyung Aina M.

; APPLICANT: PATTERSON, Chandra

; APPLICANT: AZIMZAI, Yalda

; APPLICANT: BANDMAN, Olga

; APPLICANT: TANG, Y. Tom

; APPLICANT: MATHUR, Preete

; APPLICANT: SHAH, Purvi

; APPLICANT: AU-YOUNG, Janice

; APPLICANT: REDDY, Roopa

; TITLE OF INVENTION: TRANSCRIPTION FACTORS

; FILE REFERENCE: PF-0761 PCT

; CURRENT APPLICATION NUMBER: US/10/221,625

; CURRENT FILING DATE: 2001-03-13

; NUMBER OF SEQ ID NOS: 214

; SOFTWARE: PERL Program

; SEQ ID NO 23

; LENGTH: 767


```

; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US2004003942A1 1359294CD1
; US-10-221-625-23

Query Match          7.6%; Score 81; DB 12; Length 767;
Best Local Similarity 22.9%; Pred. No. 32;
Matches 36; Conservative 29; Mismatches 56; Indels 36; Gaps 8

QY 15 VSADPHYDKITEENKAIIDAIAAIEOSETIDPMKVPDHD-KFERHVGIV---DFKGE 70
    ||| : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 543 VSAEKVNK---THSVNGITEADPTIYSGKVIKRLRSVDPTQTEYQGMIEVEGDMKE 599

QY 71 LAMRWIEARGLQMKQGGDANVKGBEGIVKAHLIGVHDDIVSMEYDLA----- 119
    : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 600 -----VYPGIVGMNKGDCIQKGS--VKFQLCV-LGQNAQTMAXNITPLRRATVECVK 651

QY 120 -----YKLGDLPHPTTHVIDIQDFVVALSLEISDE 149
    : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 652 DOFGFTINVEVGSKKLFPHVKVEVD-----GISLQAGDE 685
    : : : : : : : : : : : : : : : : : : : : : : : : : :

```

RESULT 80
US-10-282-122A-57903
; Sequence 57903, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangau
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIORITY APPLICATION NUMBER: 60/191,078
; PRIORITY FILING DATE: 2000-03-21
; PRIORITY APPLICATION NUMBER: 60/206,848
; PRIORITY FILING DATE: 2000-05-23
; PRIORITY APPLICATION NUMBER: 60/207,727
; PRIORITY FILING DATE: 2000-05-26
; PRIORITY APPLICATION NUMBER: 60/230,335
; PRIORITY FILING DATE: 2000-09-06
; PRIORITY APPLICATION NUMBER: 60/230,347
; PRIORITY FILING DATE: 2000-09-09
; PRIORITY APPLICATION NUMBER: 60/242,578
; PRIORITY FILING DATE: 2000-10-23
; PRIORITY APPLICATION NUMBER: 60/253,625
; PRIORITY FILING DATE: 2000-11-27
; PRIORITY APPLICATION NUMBER: 60/257,931
; PRIORITY FILING DATE: 2000-12-22
; PRIORITY APPLICATION NUMBER: 60/257,636
; PRIORITY FILING DATE: 2001-02-09
; PRIORITY APPLICATION NUMBER: 60/269,308
; PRIORITY FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 57903
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Enterococcus faecium
US-10-282-122A-57903

```

Query Match          7.5%; Score 80.5; DB 12; Length 245;
Best Local Similarity 23.3%; Pred: No. 7, 1;
Matches 41; Conservative 35; Mismatches 69; Indels 31; Gaps 8;

QY      64  iVDFKGEI---AARNIEARGLKQMKRQGDAN-----VKGBEIGVKAHLI---GVH 108
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      33  ILNGRGEIPKEIEBIEAFGVCVGVSGDISDYEKAGQMIKEAEKGLSIHLYVNNAGIT 92
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY      109  DIIVSMEYDLA-VK-----LGDHPHTTHVISDI---QDFWALSLEISDEGNITMITS 156
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      93  NUKLVNRMDAEPFKCLDINLIGTFNMTCHVLKXMKQKQREGAINLSSVSGLIGNQAN 152
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY      157  FEYRQFANYNVNHIGLSILDPFGVLSDVLTAFIQQDVTVRKEMTKVLAPAFKZELEK 212
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      153  YAASK-AGVVGLTKSVAREAAATGITCAIAPGF---ITDMTTEVLADKVKQSAEK 204
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 81
US-10-424-599-197424
; Sequence 197424, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yitua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 197424
; LENGTH: 323
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_202C.1.pep
US-10-424-599-197424

```

Query Match	7.5%;	Score	80.5;	DB	12;	Length	323;
Best Local Similarity	24.6%;	Pred. No. 11;					
Matches	48;	Conservative	32;	Mismatches	60;	Indels	55;
Gaps	10;						
Qy	31	KAIDDATA-----AIEQS-----ETIDPMKVPDHADKFERHVGIVDFKGEL	71				
Db	14	RKFDDAVSNGVAAPADYDLSLEALEIKSQNAVEALDLFALKCHVLSFERRL-----	64				
Qy	72	AMRNIEARGLK---OMKQGDANKGEGIVKAHLIG---VHDDISMEYDLAYKLGDL	125				
Db	65	-KDNIEAR-LKYPNQPRFADSEVELHEELQKVLGAPELYDPLVNL---NVVPSIVDL	120				
Qy	126	HPHTHTSIDICFFVVALSLEISDEGNI TMTSFVRQFAN-----VNNHIGGLSIL	175				
Db	121	--LHNDHTDIAIDVQLLODITDEVDLDDNDSARVLDALVDNSALELLVQNLRLNDS	178				
Qy	176	DP-----IFGVLSDV	185				
Db	179	DPDENAAYVGSLATV	193				

RESULT 82
US-10-437-963-166236
; Sequence 166236, Application US/10437963
; Publication No. US2004012343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.

APPLICANT: Barbazuk, Brad
APPLICANT: Li, Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
FILE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53221)B
CURRENT APPLICATION NUMBER: US/10/437,963
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 166236
LENGTH: 324
TYPE: PRT
ORGANISM: Oryza sativa
FEATURE:
NAME/KEY: unsure
LOCATION: (1)..(324)
OTHER INFORMATION: unsure at all Xaa locations
FEATURE:
OTHER INFORMATION: Clone ID: PAT_MRT4530_64965C.1.pap
US-10-437-963-166236

Query Match
Best Local Similarity 20.3%; Score 80.5; DB 16; Length 324;
Matches 43; Conservative 34; Mismatches 76; Indels 59; Gaps 8;
QY 3 KPLIAAVF-AVSADPHYDKITEINKAIDDAIAI---EQSETID-----47
DB 97 REPLIAIADYIFQVSFALLAQKEMTEAVTKAVQDAILKIGFVNQWERLDKEXSKLTDRA 156
QY 48 -----PMK--VPDHADKFERHVGIVDFKGLAMNTEARGLKQK-----85
DB 157 VLETOEPKKEVSSNDGHPKDTYDSSG-----NIDAQTRQARLHLRTNRTGCG 211
QY 86 -----ROGDANVKGEGIVKAHLI-----GVHDDIVSMEYDL-----AYKLGDLHPT 128
DB 212 TSNHHQGGNNRVPDDPYAKFKIPSGFWGYDAEKYLNKEMTVEQKFSALHVPKQHRV 271
QY 129 THVISDIOQFVALSLEISDEGNITMTSFEVR 160
DB 272 ROASSEFKDFAIMXKTGLADEGVLPFTTWEELK 303

RESULT 83
US-10-369-493-181
Sequence 181, Application US/10369493
Publication No. US20030233675A1
GENERAL INFORMATION:
APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
FILE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
FILE REFERENCE: 38-10(52052)B
CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 181
LENGTH: 540
TYPE: PRT
ORGANISM: Xenorhabdus nematophilus
US-10-369-493-181

Query Match
Best Local Similarity 7.5%; Score 80.5; DB 15; Length 540;
Matches 44; Conservative 42; Mismatches 82; Indels 69; Gaps 9;
QY 13 VASADPHYDKITEINKAIDDAIAIAEQSETIDPMKVPDHADKFERHVGIVDFKGL 71
DB 107 VAAGNPM-----DLKRGIDKAVAAVEE---LKLVSFPCSDSTAIAQVGTISANDE 156

QY 72 AMRNIARGLKQMKROGDANVKGEGIVKAHLIIGVHDD---IVSMEYDLAY-----120
DB 157 TVGKLIARAMDKV-----GKEGIVTVEGTGLEDELDVVEGQFDRGYLSPYFINK 207
QY 121 -----KLGDLHPHTHVISDIOQFVALSLEISDEGNITMTSFEV 159
DB 208 PEAGSIELENPYILLVDKISNIRELPLVEGVAKASKPLVIAEDVEGEALATL-----262
QY 160 RQFANVVNHIGGL-----SILDPIFGVLSVLTAFQDTVRKEMTKVLAPAFKRELEK 212
DB 263 -----VVNNRGIKVAAVKAPGFG---DRRKAMLDIATLTNGTVIISEIGLELEK 311

RESULT 84
US-10-282-122A-56251
Sequence 56251, Application US/10282122A
Publication No. US20040029129A1
GENERAL INFORMATION:
APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR APPLICATION NUMBER: 60/230,347
PRIOR FILING DATE: 2000-09-09
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
SEQ ID NO 56251
LENGTH: 547
TYPE: PRT
ORGANISM: Enterobacter cloacae
US-10-282-122A-56251

Query Match
Best Local Similarity 7.5%; Score 80.5; DB 12; Length 547;
Matches 43; Conservative 43; Mismatches 82; Indels 69; Gaps 9;
QY 13 VASADPHYDKITEINKAIDDAIAIAEQSETIDPMKVPDHADKFERHVGIVDFKGL 71
DB 107 VAAGNPM-----DLKRGIDKAVAAVEE---LKLVSFPCSDSTAIAQVGTISANDE 156
QY 72 AMRNIARGLKQMKROGDANVKGEGIVKAHLIIGVHDD---IVSMEYDLAY-----120

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Db      157 TVGKLIABADKV-----GKEGVITVEDGTGLEDELVDVVEGQDFRGVLSYFINK 207
QY      121 -----KLGDLHPHTTHVISDIQDFVVALSLEISDEGNITMTSFEV 159
          : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      208 PETGAVELESPFILLADKKISINIREMLPVLAEVAKAGKPLVIAEDVEGEALATL----- 262
QY      160 RQFANVNHIGGL-----SILDPFGVLSVDLTAIFQOTVRKEMTKVLAPAFKRELEK 212
          ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      263 -----VNTVRGIVKVAAVKAPFG---DRKKALQDIATLTGGTVISEIGWELEK 311
          ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 85
US-10-369-493-5550
; Sequence 5550, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 5550
; LENGTH: 160
; TYPE: PRT
; ORGANISM: Caenorhabditis elegans
US-10-369-493-5550

Query Match 7.5%; Score 80; DB 15; Length 160;
Best Local Similarity 23.4%; Pred. No. 4.4;
Matches 27; Conservative 28; Mismatches 42; Indels 20; Gaps 3;

QY      53 DHADKFRHVGVIVDFKGLAMR-----NIEARGLKOMKRGQDANVKGE---- 95
          : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      15 DQIEQFRKYFNWDEKGGKGVIRATQVQILRTWGAFFERDLKQLKEFDADGSGEIEFE 74
          : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY      96 --EGIVKAHLIGVHDDIVSMEYDLAYKGLDLPHTTHV-ISDIQDFVVALSLEISDE 149
          : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db      75 EFAAMVANFVNNENDEGLEELREAFRLYDKGNGVINVSLDRLTRALDDNVSEE 131
          : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 86
US-10-437-963-144132
; Sequence 144132, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 144132
; LENGTH: 600
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT MRT4530 44977C.1.pep

```

APPLICANT: OCHIAI, KEIKO
APPLICANT: YOKOI, HARUHIKO
APPLICANT: TATSUSHI, NAOKO
APPLICANT: SENOH, AKIHIRO
APPLICANT: IKEDA, MASATO
APPLICANT: OZAKI, AKIO
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
PRIOR FILING DATE: 2000-12-18
PRIOR APPLICATION NUMBER: JP 99/377484
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: JP 00/280988
PRIOR FILING DATE: 2000-08-03
NUMBER OF SEQ ID NOS: 7059
SOFTWARE: Patent in ver. 3.0
SEQ ID NO 5468
LENGTH: 831
TYPE: PRT
ORGANISM: Corynebacterium glutamicum
US-09-738-626-5468

Query Match 7.5%; Score 80; DB 9; Length 831;
Best Local Similarity 24.4%; Pred. No. 46;
Matches 43; Conservative 31; Mismatches 70; Indels 32; Gaps 8;
QY 29 INKADDAIAAEQSEETIDP---MKVPDHADKFER-----HVGIVDFK---G 69
DB 97 INLVNDIHSVVTPELLSDVLGVIPO-ADSFDRMDEFLLRNKARWHYGVAAIEPTG 155
QY 70 ELAMNIEARGLKQKROQDANVKGEGIVKXHLIGVHD--DIVSMYDLYAYKLGDLHP 127
DB 156 ELVVFVKPAK-----NSASARGDIFSEVGDVLGGAADLEDVVDFFV-IATFLEVINE 206
QY 128 TTHVTSIDIOQFVVALSLEISDEGNITMTSFVRQFANVNVHGGILSDIPFGVLS 183
DB 207 TSEVIDDEDGVPVGLGEGVNAAGV-ITDDLIREKLDVDSVPSSAEIIDNIVHVFT 261

RESULT 89
US-10-093-463-126
Sequence 126, Application US/10093463
Publication No. US20030208039A1
GENERAL INFORMATION:
APPLICANT: Padigar, Muralidhara
APPLICANT: Shenoy, Suresh
APPLICANT: Kekuda, Ramesh
APPLICANT: Gusev, Vladimir
APPLICANT: Pochart, Pascal
APPLICANT: Zhong, Mei
APPLICANT: Rastelli, Luca
APPLICANT: Mezes, Peter
APPLICANT: Smithson, Glenda
APPLICANT: Guo, Xiaojia
APPLICANT: Gerlach, Valerie
APPLICANT: Casman, Stacie
APPLICANT: Boldog, Ferenc
APPLICANT: Li, Li
APPLICANT: Zernusen, Bryan
APPLICANT: Tchernev, Velizar
APPLICANT: Gangolli, Esha
APPLICANT: Vernet, Corine
APPLICANT: Pena, Carol
APPLICANT: Burgess, Catherine
APPLICANT: Liu, Xiaohong
APPLICANT: Gorman, Linda
APPLICANT: Spytek, Kimberly
APPLICANT: Spaderna, Steven
APPLICANT: Voss, Edward
APPLICANT: Malyankar, Uriel
APPLICANT: Anderson, David

APPLICANT: Patturajan, Meera
APPLICANT: Miller, Charles
APPLICANT: Taupier, Raymond J. Jr.
TITLE OF INVENTION: No. US20030208039A1 Antibodies that Bind to Antigenic Polypeptic
TITLE OF INVENTION: Encoding The Antigens, and Methods of Use.
FILE REFERENCE: 21402-290A (Cura 590AT)
CURRENT APPLICATION NUMBER: US/10/093,463
CURRENT FILING DATE: 2002-06-24
PRIOR APPLICATION NUMBER: 60/283,675
PRIOR FILING DATE: 2001-04-14
PRIOR APPLICATION NUMBER: 60/338,092
PRIOR FILING DATE: 2001-12-03
PRIOR APPLICATION NUMBER: 60/274,281
PRIOR FILING DATE: 2001-03-08
PRIOR APPLICATION NUMBER: 60/274,101
PRIOR FILING DATE: 2001-03-08
PRIOR APPLICATION NUMBER: 60/325,681
PRIOR FILING DATE: 2001-09-27
PRIOR APPLICATION NUMBER: 60/304,354
PRIOR FILING DATE: 2001-07-10
PRIOR APPLICATION NUMBER: 60/279,995
PRIOR FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 60/294,899
PRIOR FILING DATE: 2001-05-31
PRIOR APPLICATION NUMBER: 60/287,424
PRIOR FILING DATE: 2001-04-30
PRIOR APPLICATION NUMBER: 60/299,027
PRIOR FILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: 60/309,198
PRIOR FILING DATE: 2001-07-31
PRIOR APPLICATION NUMBER: 60/281,194
PRIOR FILING DATE: 2001-04-04
PRIOR APPLICATION NUMBER: 60/274,194
PRIOR FILING DATE: 2001-03-08
PRIOR APPLICATION NUMBER: 60/274,849
PRIOR FILING DATE: 2001-03-09
PRIOR APPLICATION NUMBER: 60/330,380
PRIOR FILING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: 60/275,235
PRIOR FILING DATE: 2001-03-12
PRIOR APPLICATION NUMBER: 60/288,342
PRIOR FILING DATE: 2001-05-03
PRIOR APPLICATION NUMBER: 60/275,578
PRIOR FILING DATE: 2001-03-13
NUMBER OF SEQ ID NOS: 370
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 126
LENGTH: 3003
TYPE: PRT
ORGANISM: Homo sapiens
US-10-093-463-126

Query Match 7.5%; Score 80; DB 15; Length 3003;
Best Local Similarity 19.9%; Pred. No. 2.9e+02;
Matches 54; Conservative 43; Mismatches 79; Indels 96; Gaps 14;
QY 2 MKFLLIAAVFAVVASADPIHYDKITEINK--AIDDAIAAEQSE--TIDPMKVPDHADK 57
DB 658 MTEMLDESSGLLTTC-PLDYEMKTIQHLTVLALDDGTALSSQTLTVTLVDVNDAPV 716
QY 58 FERHGVIVDFKGLANRNIEARGLKQKQGDANVKGEGIVKXHLIGVHDDIVSM--- 114
DB 717 FKQHL-----YEA-SVKENQNPGEF-VTRVEALDRDSVFLNTRF--LNMCF 759
QY 115 -EYDLAYKLGDLHPHTTHVISDIQD-----FVVALSLEI-----SD 148
DB 760 AFYDAVFKNGLSAQAFVVDLEDVNDNHPVFNPSYTVTSISDETPGTEINVLATQD 819
QY 149 EGNITWTSFEVQFANVNVHIGLSILDPIFVL----- 182
DB 820 SGYGTGAYEL-----IPGNVSSLFTIDSTTGIIYTLPLSHLESTTILSMVSAQDGG 874
QY 183 -----SDVLTAIFQDTRKMTKVLAPA-FKR 208

RESULT 92

```
US-10-282-122A-75259
; Sequence 75259, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 75259
; LENGTH: 548
; TYPE: PRT
; ORGANISM: Salmonella typhimurium
US-10-282-122A-75259
```

```
Query Match 7.4%; Score 79.5; DB 12; Length 548;
Best Local Similarity 17.8%; Pred. No. 29;
Matches 42; Conservative 42; Mismatches 85; Indels 67; Gaps 8;

QY 13 VAVSADPIHYDKITEINKATDDAIAAEQSEETIDPMKVPDHDADKFERHVGIVDFKGELA 72
Db 107 VAGNPNM-----DLKRGIDKAVAA--AVEELKALSVPCSDSKAIAQVGTISANSDET 157
QY 73 MRNIEARGLKQMKRGQDANVKGEIGIVKAHLIIIGVHDD---IVSMEYDLAY----- 120
Db 158 VGKLIAEAMDKV-----GKEGVITVEDGTGLQDELVDVVEGQFDRGYLSPYFINKP 208
QY 121 -----GKEGVITVEDGTGLQDELVDVVEGQFDRGYLSPYFINKP 208
Db 209 ETGAVELESPPFILLADKKISNIREMLPVLEAVAKAGKPLIIIAEDVEGEALATL----- 262
QY 161 QFANVNVHIGGL-----SILDPIFGVLSVLTAFQDVTVRKEMTKVLAPAFKRELEK 212
Db 263 ----VVTMRGIVKVAAVKAFGFG---DRRKQMLQDIATLTGGTVISEEIGMELEK 311
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RESULT 93

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US-10-282-122A-76037
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; Sequence 76037, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 76037
; LENGTH: 548
; TYPE: PRT
; ORGANISM: Salmonella typhi
US-10-282-122A-76037
```

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Query Match 7.4%; Score 79.5; DB 12; Length 548;
Best Local Similarity 17.8%; Pred. No. 29;
Matches 42; Conservative 42; Mismatches 85; Indels 67; Gaps 8;

QY 13 VAVSADPIHYDKITEINKATDDAIAAEQSEETIDPMKVPDHDADKFERHVGIVDFKGELA 72
Db 107 VAGNPNM-----DLKRGIDKAVAA--AVEELKALSVPCSDSKAIAQVGTISANSDET 157
QY 73 MRNIEARGLKQMKRGQDANVKGEIGIVKAHLIIIGVHDD---IVSMEYDLAY----- 120
Db 158 VGKLIAEAMDKV-----GKEGVITVEDGTGLQDELVDVVEGQFDRGYLSPYFINKP 208
QY 121 -----GKEGVITVEDGTGLQDELVDVVEGQFDRGYLSPYFINKP 208
Db 209 ETGAVELESPPFILLADKKISNIREMLPVLEAVAKAGKPLIIIAEDVEGEALATL----- 262
QY 161 QFANVNVHIGGL-----SILDPIFGVLSVLTAFQDVTVRKEMTKVLAPAFKRELEK 212
Db 263 ----VVTMRGIVKVAAVKAFGFG---DRRKQMLQDIATLTGGTVISEEIGMELEK 311
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RESULT 94

```
US-10-282-122A-44041
; Sequence 44041, Application US/10282122A
; Publication No. US20040029129A1
```

```

; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 44041
; LENGTH: 664
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-10-282-122A-44041

Query Match 7.4%; Score 79.5; DB 12; Length 664;
Best Local Similarity 21.6%; Pred. No. 38;
Matches 35; Conservative 31; Mismatches 51; Indels 45; Gaps 5;

QY 1 MMKPELLIAAVFVAVSADPHYDKITEINKAIDDAIAAEQSEITDPMKV-----51
Db 355 IFSLLMTALVSFVAMAFNGNKKYEETPDVIGSVKEA-----EQIFNKNLKLKIGKISRSYSD 410
QY 52 -----PDHAKFER--HVGIVDFKG-----ELAMENIEARGLKOM 84
Db 411 KYPENEIKTPTNGERVERGSDVDVVISKGPVKMNPVIGLPKEALQKLSGLKDV 470
QY 85 KRQDANVKEEGI-----VKAHLIGVHDIVSMVEYDLAYK 121
Db 471 TIEKVVNQAQPKGYIANQSVTANTEIAHDSNIXLYESLGIK 512

RESULT 95
US-09-815-242-10901
; Sequence 10901, Application US/09815242
; Patent No. US2002061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.

; GENERAL INFORMATION:
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10901
; LENGTH: 718
; TYPE: PRT
; ORGANISM: Enterococcus faecalis
US-09-815-242-10901

Query Match 7.4%; Score 79.5; DB 9; Length 718;
Best Local Similarity 19.9%; Pred. No. 42;
Matches 45; Conservative 36; Mismatches 98; Indels 47; Gaps 8;

QY 5 LLIAAVFVAVSADPHYDKITEINKAIDDAIAAEQSEITDPMKVDPHADKFERHVGI 64
Db 345 LAIGLAFAMSGCKDVEVPDVTNETKAAASQALQSGAKVDSETKIED--DKIE-----397
QY 65 VDFKGLAMRNIEARGLKQMKR-----QSDANVKBEGIVKHAHLIGVHDD 110
Db 398 ---EGKVVKTDPKAKSVKDKRSVTLYISSGTEKIEMADYTNESYESAVALKGLGFS 454
QY 111 IVSMEYDLAYKGLDLPHTHVIS-----DIQDFVALSLEISDEGNITMTSFEVRQ 161
Db 455 QITTKKEYS-----DSVSTDNIIKQPAAGKKVDPKKDKVTITVSEGPFA-VILPSTAGYS 509
QY 162 FANVNNHIGGLSILDPFGLVDVLTAFQ--DITVRKEMTKVLAPA 205
Db 510 YTNVNNALAQL-----GISESQITRVDQASDTVEPGLVITQDPA 548

RESULT 96
US-10-282-122A-53037
; Sequence 53037, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
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; GENERAL INFORMATION:
; APPLICANT: Bristol-Myers Squibb Company
; TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTOR POLYNUCLEOTIDES AND METHODS OF USE THE
; FILE REFERENCE: D0191 NP
; CURRENT APPLICATION NUMBER: US/10/219,834
; CURRENT FILING DATE: 2002-08-15
; PRIOR APPLICATION NUMBER: US 60/313,658
; PRIOR FILING DATE: 2001-08-20
; PRIOR APPLICATION NUMBER: US 60/340,703
; PRIOR FILING DATE: 2001-10-30
; PRIOR APPLICATION NUMBER: US 60/318,675
; PRIOR FILING DATE: 2001-09-12
; PRIOR APPLICATION NUMBER: US 60/355,596
; PRIOR FILING DATE: 2002-02-06
; PRIOR APPLICATION NUMBER: US 60/333,417
; PRIOR FILING DATE: 2001-11-26
; PRIOR APPLICATION NUMBER: US 60/338,367
; PRIOR FILING DATE: 2001-12-06
; NUMBER OF SEQ ID NOS: 192
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 150
; LENGTH: 1577
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-834-150

Query Match      7.4%; Score 79.5; DB 14; Length 1577;
Best Local Similarity 20.9%; Pred. No. 1.3e+02;
Matches 41; Conservative 32; Mismatches 70; Indels 53; Gaps 8;

QY 26 TEEINKAIDDAIAAEQSETIDPMKVPDADKPERHV-----GIVDFKGLAMRNIEA 78
DB 225 TVRVNLANDNVAGIVSFQTASRSVIGHEGELIQFHVIRTFPGRGVTVVNWKIIGQNLEL 284
QY 79 RGLKQMKRQGDANVKGE-----EGIVKAHLHIGVHDDIVSME-----YDLAYKLGDLH 126
DB 285 -----NPNFSGQLFFPEGSLSNTTLFVHLDDNIPKEEYQVILYDV--RTQGV 333
QY 127 PTHHVISDIQDFVVALSLEISD-----EGNITMTSFEVROFANVNH 168
DB 334 PAGIALDDAQYAAVLTVEASDEPHGVNLFALSSRFVLLQEANITTIQLFINREFGS---- 389
QY 169 IGLLSI-LDPIFGVLS 183
DB 390 LGAINVTYTTVPGMLS 405

RESULT 100
US-10-834-149
; Sequence 149, Application US/10219834
; Publication No. US20030096751A1
; GENERAL INFORMATION:
; APPLICANT: Bristol-Myers Squibb Company
; TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTOR POLYNUCLEOTIDES AND METHODS OF USE THE
; FILE REFERENCE: D0191 NP
; CURRENT APPLICATION NUMBER: US/10/219,834
; CURRENT FILING DATE: 2002-08-15
; PRIOR APPLICATION NUMBER: US 60/313,658
; PRIOR FILING DATE: 2001-08-20
; PRIOR APPLICATION NUMBER: US 60/340,703
; PRIOR FILING DATE: 2001-10-30
; PRIOR APPLICATION NUMBER: US 60/318,675
; PRIOR FILING DATE: 2001-09-12
; PRIOR APPLICATION NUMBER: US 60/355,596
; PRIOR FILING DATE: 2002-02-06
; PRIOR APPLICATION NUMBER: US 60/333,417
; PRIOR FILING DATE: 2001-11-26
; PRIOR APPLICATION NUMBER: US 60/338,367
; PRIOR FILING DATE: 2001-12-06
; NUMBER OF SEQ ID NOS: 192
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 149
; LENGTH: 1615

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-219-834-149

Query Match      7.4%; Score 79.5; DB 14; Length 1615;
Best Local Similarity 20.9%; Pred. No. 1.3e+02;
Matches 41; Conservative 32; Mismatches 70; Indels 53; Gaps 8;

QY 26 TEEINKAIDDAIAAEQSETIDPMKVPDADKFERHV-----GIVDFKGLAMRNIEA 78
DB 263 TVRVNLANDNVAGIVSFQTASRSVIGHEGELIQFHVIRTFPGRGVTVVNWKIIGQNLEL 322
QY 79 RGLKQMKRQGDANVKGE-----EGIVKAHLHIGVHDDIVSME-----YDLAYKLGDLH 126
DB 323 -----NPNFSGQLFFPEGSLSNTTLFVHLDDNIPKEEYQVILYDV--RTQGV 371
QY 127 PTHHVISDIQDFVVALSLEISD-----EGNITMTSFEVROFANVNH 168
DB 372 PAGIALDDAQYAAVLTVEASDEPHGVNLFALSSRFVLLQEANITTIQLFINREFGS---- 427
QY 169 IGLLSI-LDPIFGVLS 183
DB 428 LGAINVTYTTVPGMLS 443

Search completed: August 6, 2004, 16:07:18
Job time : 49 secs

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